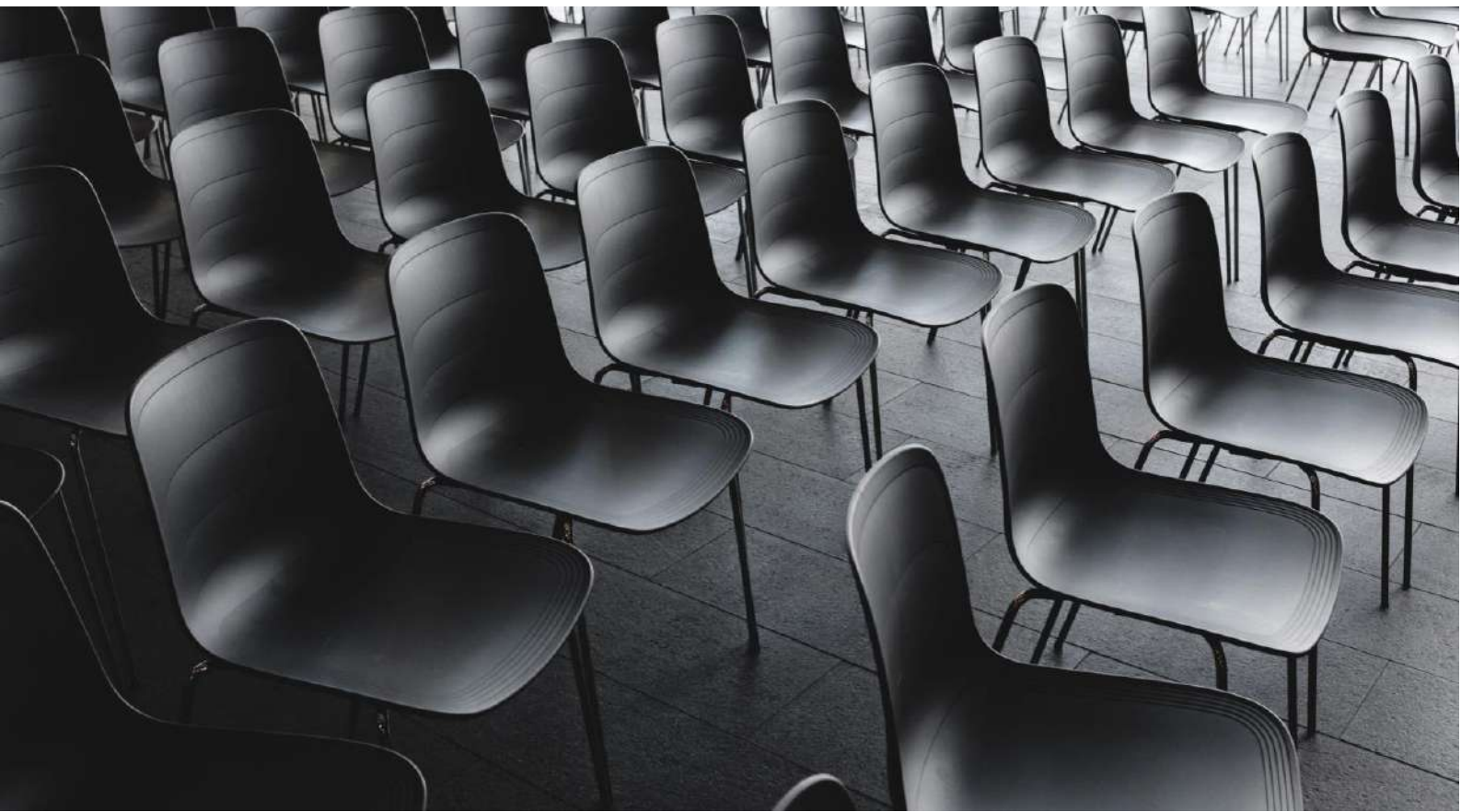


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# Teachers' Enneagram Personality Types, Their Perceived Organizational Culture and Mediation Attitudes\*

Pelin Karaduman<sup>1</sup>, Münevver Çetin<sup>2</sup>

<sup>1</sup> Foreign Languages Unit, Dogus University, Istanbul, Turkey. pelinKaradumann@gmail.com  
ORCID: 0009-0001-5775-284X

<sup>2</sup> Ataturk Education Faculty, Department of Education Administration and Supervision, Marmara University, Istanbul, Turkey. Email: mcetin@marmara.edu.tr ORCID: 0000-0002-1203-9098

Correspondence: Pelin Karaduman, Foreign Languages Unit, Dogus University, Istanbul, Turkey.  
Tel: +90 -4447997. E-mail: pelinKaradumann@gmail.com

## Abstract

The aim of this study is to investigate the relationship between teachers' enneagram personality types, their perceived organizational culture and mediation attitudes. Structural equation modeling is used in the study. The sample of the study consists of 463 teachers who work at primary, secondary and high school levels in public schools in Istanbul, Turkey. Enneagram Personality Scale, School Culture Scale, and Mediation Attitude Scale are used in the study. According to the results of the study, there are significant relationships between teachers' enneagram personality types, mediation attitudes, and organizational culture. Also, among the teachers' personality types Type 9, Type 8 and Type 1 predict teachers' mediation attitudes and organizational culture has a mediating role in the relationship between teachers' personality types and mediation attitudes. Therefore, personality types and the culture of the school should not be ignored for teachers to be able to mediate and to be guided to mediate.

**Keywords:** Enneagram, Organizational Culture, Mediation

## 1. Introduction

### 1.1 Introducing the Problem

People have come together and formed organizations to achieve some common goals and schools are one of the most crucial organizational structures for countries. Schools aim to educate the young generations who will be the future leaders, but rapid social change and educational reforms have driven schools to big transformations (Renihan et al., 2006, p. 13). During these transformations, there can be some conflicts or disputes between teachers. These disputes can be solved via mediation and to solve these disputes we see two things important, which are personality and organizational culture. Since conflicts are inevitable in schools, as in any organization,

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\* This article is derived from Pelin Karaduman's doctoral dissertation entitled "Öğretmenlerin Enneagram Kişilik Tipleri, Algıladıkları Örgüt Kültürü ve Arabuluculuk Tutumları Arasındaki İlişki" (The Relationship Between Teachers' Enneagram Personality Types, Their Perceived Organizational Culture and Mediation Attitudes) conducted under the supervision of Prof. Dr. Münevver Çetin.

solutions should be found to deal with the negative effects of conflict. Hostile relationships are not productive in a school environment and schools should help their staff and students to develop conflict management skills. Alternative dispute resolution is a form of problem solving in which all parties participate to deal with conflict and find mutually acceptable solutions (Turan & Taylor, 1997, p. 8).

The culture of the organization, the conflicts experienced and the way these conflicts are managed affect the efficient operation of the organization. In addition, the attitudes, behaviours and approaches of other members of the school culture towards these conflicts are important in managing conflicts (Özmen & Aküzüm, 2010). Mediation is mostly used as peer mediation among students in schools, but mediation can also be useful for the conflicts between teachers and between teachers and administrators (Turan & Taylor, 1997, p. 9). Because conflicts are a part of schools, these can be sometimes between teachers (Sucuoğlu, 2015; VADR, 2001; Yaraş & Gündüzalp, 2021; Zembat, 2012). School administrators are primarily responsible for managing and reconciling them. However, teachers, who are at the center of conflicts, can also be trained on the skills necessary to resolve these conflicts (Yaraş & Gündüzalp, 2021, p. 427). Also, since there are different personality types within organizations, their methods of dealing with conflicts will also be different (Magnuson, 2011). Considering Enneagram personality types, some types will deal with these conflicts better. For instance, Type 9s are excellent mediators, but Type 3s like to fight (McPartlin, 2021, p. 158). Therefore, it is seen that some types can choose mediation and be good mediator, but some can't.

There are some studies related to enneagram (Aktürk & Taştan, 2020; Schewee, 2023; Subaş, 2017; Şahin, 2019). Also, there are a lot of studies related to organizational culture in relationship with various aspects (Ayık & Ada, 2009; Clear, 2005; Özmen & Aküzüm, 2010; Sarı & Helvacı, 2019; Singh, 2007). Mediation is mostly studied as peer mediation between students or mediation skills of administrators in schools (Dağlı, 2013; Güloğlu, 2011) and there are limited studies related to teachers view about mediation, not their mediation attitudes (Şener, 2006). We couldn't find any studies which examine the relationship between mediation, organizational culture and enneagram. In this study, mediation is studied in terms of teachers. Two factors are considered important in mediating conflicts. One of these is the personality types of teachers and the other is organizational culture. The personality type of the teacher is important in whether he/she has mediation characteristics or not and whether he/she can carry out this intervention or not. In addition, the organizational culture of the institution, the prevailing situation in the institution can also affect whether teachers will make such an intervention or not. For this reason, in this study it is aimed to examine the relationship between teachers' enneagram personality types, their perceived organizational culture and mediation attitudes. In this direction, the sub-purposes are as follows:

1. Do teachers' enneagram personality types significantly predict teachers' mediation attitudes?
2. Do teachers' enneagram personality types significantly predict their perceptions of organizational culture?
3. Do teachers' perceptions of organizational culture significantly predict teachers' mediation attitudes?
4. Is there a mediating role of organizational culture in the relationship between teachers' enneagram personality types and mediation attitudes?

## *1.2 Literature Review*

### *1.2.1 Organizational Culture*

In schools, there has always been a unique, powerful, yet challenging to define aspect that is felt by everyone. For this concept, we use the term "culture" which provides school leaders with a more accurate way to understand the unwritten rules, traditions, customs, and expectations of schools. These informal patterns influence everything from behaviour, relations to feelings (Deal & Peterson, 2016, p. 7). Schein (2004, p. 17) defined organizational culture as "a set of basic shared assumptions that the group has learned while resolving its problems of external adaptation and internal integration, that has worked well enough to be considered valid, and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems." Additionally, researchers have classified types of organizational culture in different ways (e.g., Handy, 1976; Harrison, 1972; Pheysy, 2003; Cameron & Quinn, 2006; Miles & Snow, 2003; Denison & Spreitzer, 1991).

Inspired by the earlier works of Harrison and Handy, Pheyse (2003) introduced four organizational culture types. In role culture, meeting expectations is crucial and government systems and large corporations can be given as examples. The term role specifies job descriptions, rules, and behavioral patterns related to how individuals in each position should act. In success culture, getting the job done is more important than the rules. Everybody is interested in their jobs and getting the job done is also important for their personal interests. Consulting firms, research organizations are examples of this type. It is the result of the interaction of people who have come together to solve their problems. In power culture, some people are more dominant and the rest just obey. Obedience to authority is dominant and there is a stable order with demarcated boundaries. In support culture, where personal relationships are important, bureaucracy is disliked and employees have the right to have a say in the decision-making system (Pheyse, 2003, pp. 15-18).

School culture is the traditions, values and beliefs that are unique to that school and established within its own history. Culture shows the ways things are done in a school (Kruse and Louis, 2008, p. 3). Schools are different from each other is because of the different cultures that have settled in schools over time. In order for schools to be effective, educators need to understand the dominant organizational culture in their schools (Gruenert & Whitaker, 2015, pp. 2-3). Also, school culture has a relationship with many issues such as school effectiveness (Ayık & Ada, 2009), student achievement (Clear, 2005; Demirtaş, 2010), teacher behaviours (Arpaguş, 2011), readiness for organizational change (Sarı & Helvacı, 2019), organizational commitment (Erkmen & Bozkurt, 2011; Singh, 2007), organizational citizenship (Kaya, 2015), perspectives or solutions to conflicts (Himmetoğlu, 2014; Özmen & Aküzüm, 2010). Therefore, the importance of organizational culture, which affects everything in schools so much, should not be underestimated and should be included in the studies.

### 1.2.2 Enneagram

Personality consists of innate and learned abilities and skills, environment, education, instincts and ambitions, situations, the influence of others and personality type. Although many of these factors change, the personality type remains the same throughout a person's life. Knowing the personality types of the people they work with helps managers to understand what motivates them, what they like to do, what they are predisposed to, how they will behave in certain situations, how they will perform a task, why some people have conflicts with others or with themselves (Garner, 2012, pp. 11-12). Therefore, it is important to know the personality types of the employees in the organization for the sake of the leader and organizational culture. One of the best models for determining personality types and understanding oneself is Enneagram (Ferda & Karabulut, 2004, s. 7). Enneagram describes nine personality types, their patterns and the subconscious motives behind these patterns (Makani, 2010, p. 11).

Type 1s are called the Enneagram's perfectionists. They set high standards for themselves. They have high moral standards. They are reliable, hardworking and attentive (Andre, 2014, p. 27). They are critic for themselves and others and sure that there is only one right way, feel that they are ethically super, postpone and delay things because they are afraid of doing wrong. Ones can be very clever, moral heroes (Palmer, 1991, p. 37).

Type 2s are the givers and helpers of Enneagram. They have high empathy skills and are often very sociable, friendly and approachable. Once friendships are established, they may lose their boundaries (Andre, 2014, pp.27-28). They want emotional closeness and acceptance. They want to be loved and appreciated as the indispensable person. They dedicate themselves to meeting the needs of others. They are manipulative. They have many personalities, showing a different personality to each good friend. They are seductive (Palmer, 1991, p. 39).

Type 3s are interested in achievement and performance. They are workaholics. They avoid failure. They are friendly and popular. They have an extraordinary ability to mobilize and inspire others. Their intense results-oriented drive often leads to success, but their competitiveness can be destructive for themselves and those close to them (Andre, 2014, p. 28). They want to be loved for their performance and achievements. They are competitive. They are obsessed with appearing winning. They are masters of appearances. They deny their true self and work identity. They try to appear more productive (Palmer, 1991, p. 39).



Type 4s are the most emotional type. They are described as romantic and individualistic. They have excellent creative skills and are highly empathetic, but they are also pensive and dramatic. Many experience melancholy and believe that something is missing from their lives. This leads to self-discovery and intuitive states (Andre, 2017, p. 28). They seek the unattainable. They focus on the tragic, sad, artistic, emotional, absent lover or friend. (Palmer, 1991, p. 39).

Type 5s have private and secretive lives and rarely show their emotions. They focus on knowledge and learning, their fear of inadequacy inhibits their ability to take action. They are known as observers and researchers because they constantly seek knowledge, but they often don't share it. Because of their minimalist approach to life, they isolate themselves from people (Andre, 2014, pp. 28-29). Palmer (1991, p. 39) states that Type 5s keep emotional distance from others, protect their privacy and don't interfere with others. It is a defense for Type 5s to do nothing instead of being involved in something. Attachment and the needs of others make them feel exhausted, so they isolate themselves from people and emotions.

Type 6s have a tendency to be highly analytical, responsible and loyal. They tend to be true to their own beliefs and to their friends. They respond to their inner fears by hiding them or by aggressive ways of challenging their fears. They are called phobic or counter-phobic (Andre, 2014, p. 29). According to Palmer (1991, pp. 39-40) Type 6s are cowardly, responsible, and uncomfortable with doubt. They withdraw and postpone themselves. Thinking takes the place of doing, they are afraid to act. They are described as anti-authoritarian, altruistic and loyal to causes. Phobic 6s are indecisive, feel persecuted and give up when cornered. Counter-phobic 6s feel cornered all the time and therefore tend to fight back more aggressively.

Type 7s have a playful approach to life and are energetic. They can easily lose focus and appear disorganized at times. Taking on too much can lead to procrastination, forgetfulness and even physical exhaustion (Andre, 2014, p. 29). They have a superficial, artificial, adventurous, expecting everything to be good and delicious. They have problems with obedience and want to remain emotionally intense. They are happy most of the time, have a habit of starting things but not seeing them through (Palmer, 1991, p. 40).

Type 8s are bosses or challengers. This type shows a lot of power and force. They have the ability to make things happen through a direct, sometimes coercive approach. Their main fear is to be emotionally hurt. They act confidently, believe in justice, and defend the oppressed (Andre, 2014, pp. 29-30). They are very protective. They defend themselves and their friends, they are aggressive, dominating and love to fight. They should be under control. They can show anger and coercive behaviors, they have great respect for opponents who will stand against them and fight. Evolved 8s are excellent leaders. Type 8 can be strong advocates for others and they want to create an atmosphere of trust for their friends (Palmer, 1991, p. 40).

Type 9s are described as mediators and peacemakers. They hate conflict and they get along well with others because they love peace and harmony. Saying no is difficult for them as it is a personal decision and brings change. They are mostly compliant but at times have strong stubbornness to control others. They are generally cool-headed. They have a calm and reassuring attitude. They get along well with everyone (Andre, 2014, p. 30). They see all points of view. They know the needs of others better than their own needs. They are accepted by others. Evolved 9s are great peacemakers, mediators, counselors, negotiators, and can succeed very well if they are on the right track (Palmer, 1991, pp. 40-41).

### 1.2.3 Mediation

Conflicts and disagreements are inevitable in all human relationships, societies and cultures, and because of the high cost of conflict, people throughout history have sought peaceful solutions to deal with conflict. Many different effective procedures have been developed to resolve and manage conflicts (Moore, 2014). Conflict resolution is the field of study that encompasses all of the methods used by peacekeepers, family and business interventions, law enforcement and others to find peaceful solutions. Alternative dispute resolution (ADR) is only one part of this field (Beard, 2012, p. 5). Mediation is one of the alternative dispute resolution methods and involves the use of a third party, but unlike an arbitrator or judge, the mediator does not have the authority to impose a solution on

the parties. The purpose of the mediator is to facilitate negotiation and help the parties reach a mutually acceptable resolution of their dispute. It is a private, confidential, non-public, voluntary process (Mnookin, 1998).

In addition to many factors affecting the success of the mediation process, the mediator has a significant impact on conflict resolution and reconciliation (Brett, Drieghe & Shapiro, 1986; Carnevale, 1986; Shapiro, Drieghe, & Brett, 1985; Young, 1972). The mediator's personality, experience and skills affect mediation (Bercovitch & Jackson, 2009, p. 38). Although there are many studies on the methods, models and techniques applied in mediation, there is very little interest and studies on the personality traits of the mediator that will contribute to the process (Collins, 2005, p. 1; Bowling & Hoffman, 2003, p. 14). Wilson and Irvine (2014, pp. 3-5) argue that while there is much caution and polemic about the ideal qualities of mediators, there is very limited empirical work and that personal traits and characteristics have an impact on entry, selection, practice, commercial success and the ability to gain and stay in mediation. When selecting mediators, the personality traits, knowledge and experience of the mediators should be considered (Amar, 2007, pp. 80-81). According to Bowling and Hoffman (2003, pp.13-14) mediation training and learning techniques have a significant contribution to mediation. In addition, the combination of psychological, intellectual and spiritual characteristics of a person also has a significant and direct impact on the mediation process and outcome. According to Moore et al. (2011, p. 77), a mediator must be natural and impartial; give equal voice to the parties; understand the conflict; maintain confidentiality; communicate effectively; ensure trust on all sides; be sensitive to social diversity and understand the subtle imbalance of power in society. Also, a mediator shouldn't be influenced by personal and private values, but should be able to show patience; be honest, mature, empathetic, analytical, and help to negotiate and resolve the dispute. Bowers (2000, ss. 114-115) have also stated that a mediator should be impartial, trustworthy, flexible, creative, patient, able to understand different perspectives, able to analyze problems and discover key points, most importantly able to balance training, knowledge, judgment and intuition and a good listener. Also, researchers state that, building rapport (Crawley & Graham, 2002; Goldberg, 2005), being reliable (Goldberg, 2005; Goldberg, Sander and Rogers, 1992; Monagan & James, 2010; Sandu, 2013; Zaleniene & Tvaronaviciene, 2010), neutral (Astor, 2007; Cloke, 2002; Sandu, 2013; Cooley, 2006; Rahman, 2012; Weinstein, 2001); confidentiality (Meyer, Farrell, Northup, & Plybon, 2000; Murray, 2011; Moore, 2014; Rahman, 2012; Sandu, 2013; Shapira, 2016), optimism (Curtis, 2015; Sandu, 2013; Boulle, Colatrella and Piccighioni, 2008), communication skills (Alikılıç, 2017; Collins, 2005; Meierding, 2004), listening skills (Collins, 2005; Diaz, 2007; Frenkel & Stark, 2018; Meierding, 2004; Rhizome, 2010), empathy (Collins, 2005; Curtis, 2015; Duffy, 2010; Goldberg, 2005; Gordon, 2015; Meierding, 2004; Isenhardt & Spangle, 2000) are very important for a mediator.

## 2. Method

Structural Equation Modeling was used to examine the mediating role of organizational culture in the relationship between teachers' enneagram personality types and mediation attitudes. Structural equation modeling is a statistical modeling technique seen as a combination of factor analysis, regression and path analysis. It is graphically visualized with a path diagram and the model is presented with a series of matrix equations (Hox & Bechger, 1999, p. 1). Structural equation modeling offers the opportunity to combine and apply multiple regression, factor analysis, (M)ANOVA and many other statistical procedures and is a statistical technique that works with a system of regression equations rather than single or multiple linear regression and takes into account many equations simultaneously (Nachtigall et al., 2003). In the structural equation modeling, Baron and Kenny's (1986) method was used to determine the mediating role. According to Baron and Kenny (1986), there are three stages of modelling. For these models, in this study the independent variable was enneagram personality types, the mediating variable was organizational culture and the dependent variable was mediation attitude.

### 2.1 Population and Sample

The sample group of the study is 463 teachers working at primary, secondary and high school levels in public schools in Istanbul. Of the 463 teachers who participate in the study, 324 are woman (%70) and 139 are men (%30); 37 (%8) are 21-30 years old, 190 (%41) are 31-40 years old, 163 (%35,2) are 41-50 years old, 73 (%15,8) are aged 51 and over; 365 (%78,8) are married, 98 (%21,2) are single; 102 (%22) have a bachelor degree and 361 (%78) have a master degree; 26 (%5,6) have 0-5 years of service in the teaching profession; 93 (%20,1) have 6-

10 years of service in the teaching profession, 101 (%21,8) have 11-15 years of service in the teaching profession, 75 (%16,2) have 16-20 years of service in the teaching profession and 168 (%36,3) have 21 or more years of service in the teaching profession; 146 (%31,5) work in primary schools, 181 (%39,1) work in middle school and 136 (%29,4) work in high school; 220 (%47,5) have 0-5 years of service in the organization where they work, 132 (%28,5) have 6-10 years of service in the organization where they work, 59 (%12,7) have 11-15 years of service in the organization where they work, 28 (%6) have 16-20 years of service in the organization where they work and 24 (%5,2) have 21 and more years of service in the organization where they work. 62 (%13,4) have 25 or fewer teachers working in their schools, 204 (%44,1) have 26-50 teachers working in their schools and 197 (%42,5) have 51 or more teachers working in their schools.

## 2.2 Data Collection Tools

"Personal Information Form" created by the researcher, "Enneagram Personality Scale" developed by Subaş and Çetin (2017), "School Culture Scale" developed by Terzi (2005) and "Mediation Attitude Scale" developed by the researcher were used in the study.

### 2.2.1 Personal Information Form

The personal information form was developed by the researcher and information about the demographic characteristics of the teachers such as gender, age, marital status, educational status, length of service in the teaching profession, type of school, years of service in the school and the number of teachers working in the school were collected.

### 2.2.2 Enneagram Personality Scale

The Enneagram Personality Scale developed by Subaş and Çetin (2017) is a 4-point Likert-type scale. It has 9 factors with 27 items. Each of the nine Enneagram personality types is included in one factor and each factor has 3 items. Confirmatory factor analysis was conducted for the study. According to the results of the CFA analysis, it was seen that the goodness of fit levels of the model were within the acceptable and excellent fit range with  $\chi^2/df=1.235$ ;  $RMSEA=0.022$ ;  $SRMR=0.031$ ,  $NFI=0.98$ ;  $CFI=1.00$ ;  $GFI=0.95$  and  $AGFI=0.93$  values and it was determined that the factor structure explained was confirmed. In addition, reliability analysis of the dimensions of the scale was conducted and reliability values of the factors were calculated. According to the results of the analysis, Cronbach's Alpha values were 0.827 for Type 1, 0.833 for Type 2, 0.868 for Type 3, 0.805 for Type 4, 0.802 for Type 5, 0.793 for Type 6, 0.839 for Type 7, 0.855 for Type 8, 0.724 for Type 9 and it was determined that the reliability of all factors was high (Cronbach's Alpha>0.70).

### 2.2.3 School Culture Scale

In the study, the School Culture Scale developed by Terzi (2005) was used. It is a five-point Likert-type scale that includes four factors: support culture, success culture, bureaucratic culture, and task culture, respectively. Confirmatory factor analysis was conducted for the study. According to the results of the CFA analysis, it was seen that the goodness of fit levels of the model were within the acceptable and excellent fit range with  $\chi^2/df=1.275$ ;  $RMSEA=0.024$ ;  $SRMR=0.032$ ,  $NFI=0.99$ ;  $CFI=0.99$ ;  $GFI=0.93$  and  $AGFI=0.92$  values and it was determined that the factor structure explained was confirmed. In addition, reliability analysis of the overall scale was conducted and calculated. According to the results of the analysis, Cronbach's Alpha value was 0.941 for the overall scale so it was determined that the reliability of the overall scale was high (Cronbach's Alpha>0.70).

### 2.2.4 Mediation Attitude Scale

In the study, Mediation Attitude Scale was developed to measure the mediation attitudes of teachers. It is a five-point Likert-type scale that includes 25 items under four factors which are thought, help and communication, equipment, and behavior respectively. Confirmatory factor analysis was conducted for the study. According to the results of the CFA analysis, it was seen that the goodness of fit levels of the model were within the acceptable and

excellent fit range with  $\chi^2/df=4.159$ ; RMSEA=0.083; SRMR=0.054, NFI=0.96; CFI =0.97; GFI=0.92 and AGFI=0.90 values and it was determined that the factor structure explained was confirmed. In addition, reliability analysis of the overall scale was conducted and calculated. According to the results of the analysis, Cronbach's Alpha value was 0.937 for the overall scale so it was determined that the reliability of the overall scale was high (Cronbach's Alpha>0.70).

### 2.3 Data Collection

Legal permissions were first obtained to administer the scales. Then, in the first semester of the 2022-2023 academic year, visits were made to schools, teachers were informed about the purpose of the study and what it would be used for and that private information would be kept, the scales were delivered to the volunteer teachers and collected after they answered. A total of 472 forms were collected and incomplete forms were eliminated and a total of 463 data forms were collected.

### 2.4 Data Analysis

The findings were analyzed with SPSS program and LISREL program. Frequency and percentage analysis was used to determine the distribution of the participants according to their demographic characteristics, and Pearson correlation analysis was used for the relationship between the variables due to the normal distribution of the data. Cronbach's Alpha analysis was used to determine the reliability of the scales, CFA was used to determine the suitability of the factor structures for the study, and structural equation modeling was used to test the mediation model of the study.

## 3. Results

First of all, the distribution of the data was examined, and as a result of the normal distribution analysis, it was determined that the data obtained from the central tendency measurements examined were from a normal distribution since the mean-median was close to each other and the kurtosis and skewness were between  $\pm 2$  (George & Mallery, 2010). Then, the relationships between the measured variables were examined and Pearson correlation results are given in Table 1.

Table 1: Correlations of variables

Variables	1	2	3	4	5	6	7	8	9	10	11	
Type 9 (1)	r	1	-0,507	0,587	-0,561	-0,486	-0,523	-0,531	-0,370	0,468	0,466	0,554
	p		0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*
Type 3 (2)	r	1		-0,719	0,585	0,698	0,634	0,613	0,482	-0,690	-0,510	-0,541
	p			0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*
Type 2 (3)	r		1		-0,549	-0,625	-0,596	-0,494	-0,400	0,620	0,510	0,503
	p				0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*
Type 7 (4)	r			1		0,493	0,612	0,506	0,404	-0,626	-0,434	-0,527
	p					0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*
Type 1 (5)	r				1		0,575	0,633	0,534	-0,583	-0,483	-0,515
	p						0,001*	0,001*	0,001*	0,001*	0,001*	0,001*
Type 4 (6)	r					1		0,546	0,452	-0,714	-0,493	-0,509
	p							0,001*	0,001*	0,001*	0,001*	0,001*
Type 5 (7)	r						1		0,556	-0,616	-0,405	-0,520
	p								0,001*	0,001*	0,001*	0,001*
Type 6 (8)	r							1		-0,488	-0,317	-0,376
	p									0,001*	0,001*	0,001*
Type 8 (9)	r								1		0,509	0,517
	p										0,001*	0,001*
Mediation (10)	r									1		<b>0,546</b>
	p											0,001*
Organizational Culture (11)	r											1
	p											

It was determined that the highest positive correlation was between Type 2, helper personality type and mediation attitudes and that this relationship was significant ( $r=0.510$ ;  $p<0.05$ ). This result means that when mediation levels are improved, helping personality levels will also improve, albeit at a moderate level. Also, it was determined that the highest positive correlation was between Type 9, peace-maker personality type and organizational culture and this relationship was significant ( $r=0.554$ ;  $p<0.05$ ). This result means that when the level of organizational culture is improved, the level of peace-maker personality will also improve, albeit at a moderate level.

It was determined that there was a positive, moderately significant relationship between teachers' mediation attitudes and organizational culture ( $r=0.546$ ;  $p<0.05$ ). This result means that when organizational culture levels are improved, mediation attitude levels will also improve, albeit at a moderate level. The SEM analysis path diagram of the first model established to determine whether teachers' personality types predict mediation attitudes was given in Figure 1.

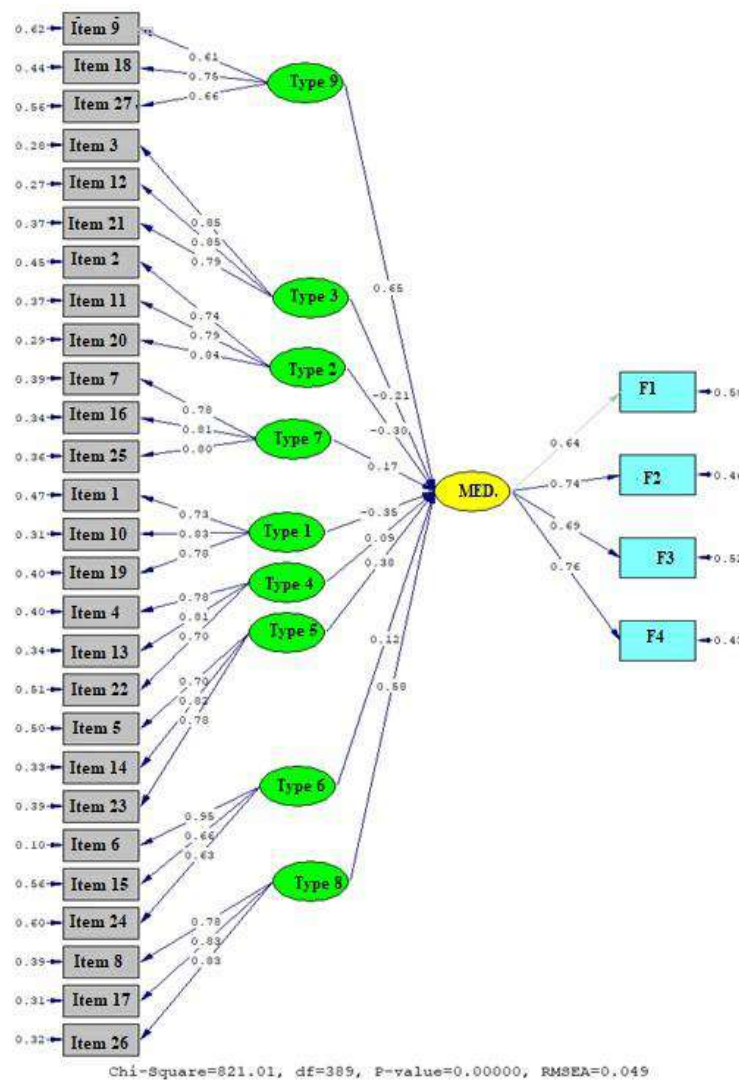


Figure 1: Path diagram for the first model

According to Figure 1, in the first model of the study, the prediction of teachers' personality types on mediation attitudes was examined, and it was determined that the goodness of fit values of the first model of the research were excellent with  $\chi^2/df=2.111$ , excellent with RMSEA value 0.049, and other fit criteria were in the excellent or acceptable range with CFI: 0.99, NFI: 0.98, NNFI: 0.99, GFI: 0.93, AGFI: 0.91, RMR: 0.048, SRMR: 0.031. The analysis results of the first model are given in Table 2.

Table 2: SEM results for the first model

Paths	Standardized Parameter Estimates	t values	Result
(Type 9)→(Mediation)	0.65	2.54*	Significant
(Type 3)→( Mediation)	-0.21	-0.97	Insignificant
(Type 2)→( Mediation)	-0.30	-1.12	Insignificant
(Type 7)→( Mediation)	0.17	1.28	Insignificant
(Type 1)→( Mediation)	-0.35	-2.09*	Significant
(Type 4)→( Mediation)	0.09	0.45	Insignificant
(Type 5)→( Mediation)	0.38	1.78	Insignificant
(Type 6)→( Mediation)	0.12	1.36	Insignificant
(Type 8)→( Mediation)	0.58	2.33*	Significant

\*p<0.05

According to Table 1, it was seen that only Type 9, Type 1 and Type 8 personality types significantly predicted teachers' mediation attitudes ( $t > 1.96$ ;  $p < 0.05$ ). With this result, it was determined that Type 9 personality type had a positive effect of 0.65 units, Type 8 personality type had a positive effect of 0.58 units, and Type 1 personality type had a negative effect of 0.35 units on teachers' mediation attitudes.

In the second model of the study, only Type 1, Type 8 and Type 9 were used among the personality types that had a significant effect on the dependent variable. In the second model of the study, the SEM analysis path diagram of the model related to the prediction of personality types on organizational culture and organizational culture on teachers' mediation attitudes is given in Figure 2.

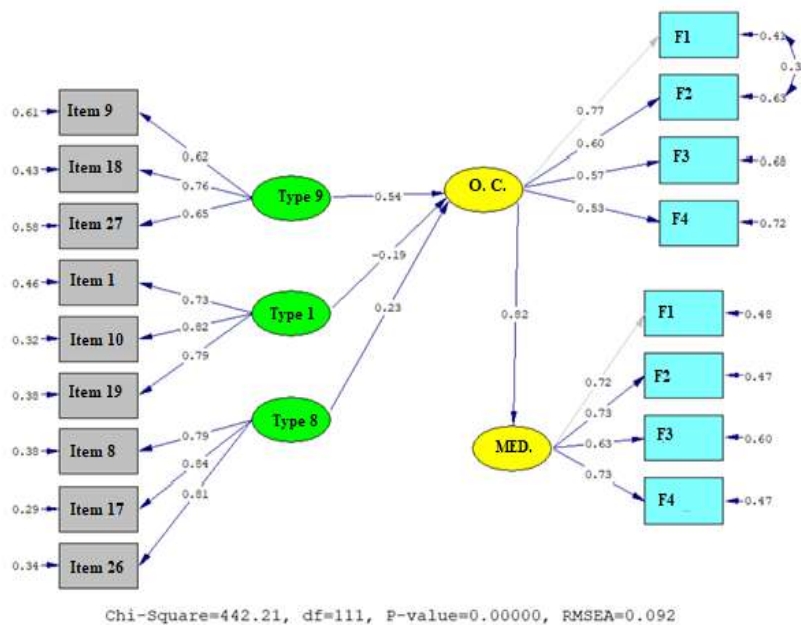


Figure 2: Path diagram of the second model

According to Figure 2, the goodness of fit values of the model were acceptable with  $X^2/sd=3.983$ , RMSEA value was acceptable with 0.092, and other fit criteria were found to be in the excellent or acceptable range with CFI: 0.99, NFI: 0.98, NNFI: 0.98, GFI: 0.92, AGFI: 0.90, RMR: 0.013, SRMR: 0.010. The results of the second model of the study are given in Table 3.

Table 3: SEM results for the second model

Paths	Standardized Parameter Estimates	t values
(Type 9)→(O. C.)	0,54	6,70*
(Type 1)→( O. C.)	-0,19	-2.34*
(Type 8)→( O. C.)	0,23	3.19*
(O. C.)→(Mediation)	0,82	12.18*

\*p<0.05

When Table 3 is examined; the prediction of organizational culture by personality types was found statistically significant for Type 9 ( $t=6.70 > 1.96$   $p < 0.05$ ), Type 1 ( $t=-2.34 > -1.96$ ;  $p < 0.05$ ) and Type 8 ( $t=3.19 > 1.96$   $p < 0.05$ ). These results show that teachers' Type 9 personality type has a positive effect of 0.54 on organizational culture, Type 8 personality type has a positive effect of 0.23 on organizational culture and Type 1 personality type has a negative effect of 0.19 units on organizational culture.

Also, that organizational culture predicts teachers' mediation attitudes, was found to be statistically significant ( $t=12.18 > 1.96$   $p < 0.05$ ). This result indicates that a one-unit increase in the participants' organizational culture levels will lead to a 0.82-unit increase in their mediation attitude levels.

The results of the last model (Model 3), which decides whether there is mediation or not, are given in Figure 3.

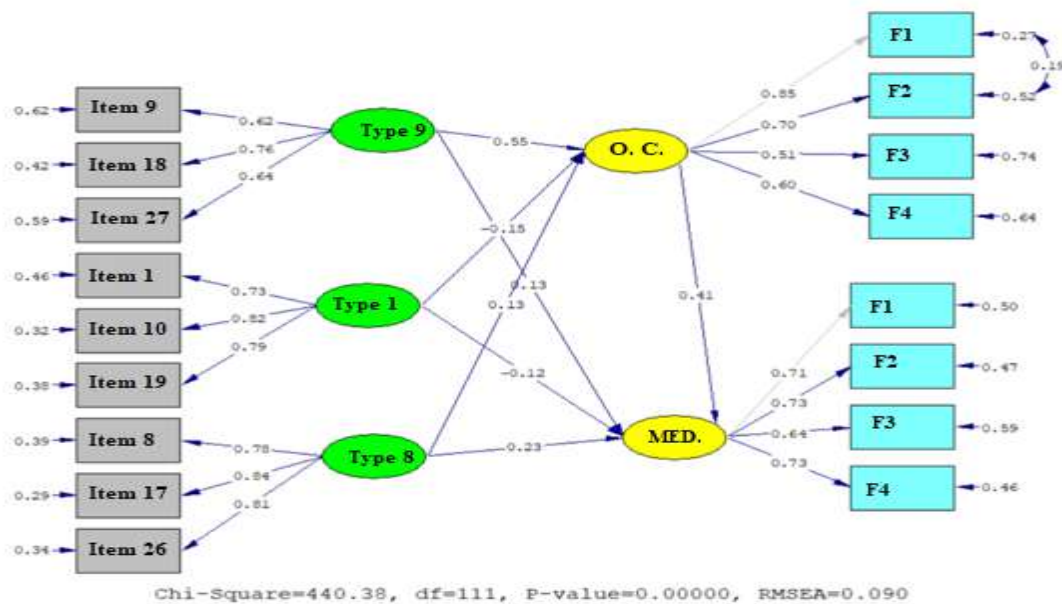


Figure 3: Path diagram for mediating role

According to Figure 3, the goodness of fit values of the established model were acceptable with  $\chi^2/df=3.967$ , RMSEA value was acceptable with 0.090, and other fit criteria were determined to be in the excellent or acceptable range with CFI: 0.99, NFI: 0.99, NNFI: 0.99, GFI: 0.93, AGFI: 0.90, RMR: 0.022, SRMR: 0.015. The results of the mediating role of the research are given in Table 4.

Table 4: Effect coefficients for the mediating role of the study

Paths	Impact Coefficients			Result
	Standardized $\beta$	t	p	
Type 9 → Med.	0.13	1.35	P>0.05	Full Mediation
Type 1 → Med.	-0.12	-1.42	P>0.05	Full Mediation
Type 8 → Med.	0.23	3.08*	P<0.05	Partial Mediation

\*p&lt;0.05

When Figure 3 and Table 4 are examined, it is determined that the effect path of organizational culture on mediation has an effect of 0.41 and is significant at 99% confidence level. Since this condition is met, mediation can be examined according to Baron and Kenny. To talk about mediation according to Baron and Kenny, the first model in which the effect of the independent variable on the dependent variable without the mediating variable is given should be examined. According to the first model it was determined that the effect of Type 9 on mediation in was 0.65, Type 1 was -0.35 and Type 8 was 0.58 and these paths were significant. When the final model was examined as a result of the inclusion of the mediator variable in the model, it was determined that the effect of Type 9 on mediation was 0.13 ( $t=1.35<1.96$ ;  $p>0.05$ ), and the effect of Type 1 on mediation was -0.12 ( $t=-1.42<1.96$ ;  $p>0.05$ ) was found to be insignificant so it was determined that organizational culture was a full mediator, and the effect of Type 8 on mediation was found to be significant at 0.23 ( $t=3.08>1.96$   $p<0.05$ ), but it was determined to be partially mediated because it reduced its effect from 0.58 to 0.23 when there was no mediator variable.

#### 4. Discussion

In this study, the relationships between teachers' enneagram personality types, their perceived organizational culture and mediation attitudes were examined. When the literature was reviewed, no study about examining directly the relationship between teachers' enneagram personality types, mediation and organizational culture was found. Therefore, the results were discussed by utilizing similar topics and samples.

According to the results of the correlation analysis, the highest positive relationship between enneagram personality types and mediation attitudes was found between Type 2 and mediation attitudes. Similarly, Şahin (2019, p. 96) found out that Type 2 preferred the integration method in his study. Integration is a win-win style of conflict resolution in which the needs of both parties are taken into account, just like mediation, and problem solving is done in cooperation (Rahim, 2023, p. 29). This result supports the research.

Also, the highest positive relationship between Enneagram personality types and organizational culture was found between Type 9 and organizational culture. Type 9 is the type that does not like conflict in organizations, likes harmony, and wants to work in harmony (McPartlin, 2021; Palmer, 1995). Therefore, this type can be expected to have a high perception of organizational culture. The research also supports this. In addition, a positive and moderately significant relationship was found between mediation attitude and organizational culture. Similarly, Özkara and Tunç (2020) found a positive relationship between organizational culture and integration as a conflict method.

According to the first model of the structural equation model, only three of the personality types of the teachers predicted the mediation attitudes. According to the results of the analysis, among the personality types of the teachers, Type 9 and Type 8 have a significant positive effect on mediation attitudes while Type 1 has a significant negative effect. For Type 8s, this may be due to the fact that Type 8s protect the powerless, try to help them and provide justice (Andre, 2014; Palmer, 1991; Palmer, 1995; Riso & Hudson, 2003). Because Type 8s are the people who express the unhappiness of people who are unhappy but do not express it (Palmer, 1995, p. 219). For Type 9s, the result may be due to the fact that this personality type attaches importance to peace and togetherness, calms people down and tries to help the environment to prosper (Riso & Hudson, 2003, pp. 164-165) and because Type 9s love peace, approach impartially, look for alternative ways and try to ensure peace (Palmer, 1995, pp. 224-236). Yılmaz, et al. (2016), who examined the relationship between personality types in the conceptually similar five-



factor personality theory and enneagram personality types, found a strong positive relationship between Type 1 personality type and conscientiousness, Type 9 personality type and agreeableness, and Type 8 personality type and extraversion. Considering this situation, it was seen that similar results were reached for Type 9 and Type 8 in studies examining conflict management and five-factor personality types (Forrester & Tashchian, 2013; Yürür, 2009; Yıldızoğlu & Burgaz, 2014; Turhan & Tiftik, 2022).

The reason for the result in the Type 1 may be that Type 1s feel that it is not their responsibility to help others in a dispute and that they will be disempowered if they support someone in a dispute (Palmer, 1995, p. 57). Therefore, it may seem usual for Type 1s to prefer to avoid mediation. Şahin (2019) concluded that Type 1s chose dominance method as the first choice quite often. Since the dominance method can be considered as the opposite of mediation, this result supports the findings of this study. In the light of these studies, it can be said that Type 1s withdraws themselves from mediation in case of a dispute and Type 1 has a negative effect on the mediation attitude of the person.

Among the personality types of teachers, Type 9, Type 8 and Type 1 significantly predict organizational culture. According to the results of the analysis, Type 9 and Type 8 have a positive effect on organizational culture, while Type 1 has a negative effect. Type 9s like to take part in organizations, care about the needs of others and tend to get together with them (Sutton, 2007). This type gets along well with everyone, gives confidence, is harmonious and takes on the role of peacemaker and mediator when there is a problem (Andre, 2014). Therefore, it can be considered normal for Type 9s to have the understanding of organizational culture in order to gain a sense of belonging and to keep the organization alive, to spread it within the organization and to try to keep the organization alive. All these may have enabled Type 9s to have a positive impact on organizational culture.

Type 8s are the types who value rules in organizations, have leadership potential, and at the same time are very protective and want to create an environment of trust that defends their friends (Palmer, 1991; 1995). In addition, this type with leadership characteristics can show themselves at the highest level in assertive and defensive organizations (McPartlin, 2021). Therefore, they can be popular and desired people within organizations. In addition, this defensive and leadership trait may have had a positive impact on organizational culture.

Type 1s want everything to be the best and the most accurate and they give importance to plans, programs, details and prefer to be formal with everyone (Palmer, 1995). Because they dedicate themselves to perfection and do not like others in their work, they isolate themselves (Riso & Hudson, 2003). In addition, according to Palmer (1995), Type 1s do not blame themselves when mistakes are made. All these may cause them not to feel belonging in organizations and not to be liked by the members of the organization. Therefore, it may be possible for this type to negatively affect the organizational culture. Hebenstreit (2008) found out in his study that Type 9s attach more importance to collaborative work environment and Type 1s want a more competitive and skill-oriented salary system. In other words, Type 9s attach more importance to the organization and organizational culture, while Type 1s attach more importance to their own skills and the reward and salary they will receive. This result supports the conclusion reached in this study.

Teachers' level of organizational culture significantly predicts their mediation attitudes. According to the results of the analysis, an increase in organizational culture leads to an increase in teachers' mediation attitudes. In the literature, there are studies showing positive relationships between organizational culture and organizational commitment (Erkmen & Bozkurt, 2011; Singh, 2007). In a place where there is organizational commitment, teachers can mediate when there is a conflict. There are also studies that the prevailing organizational culture affects the method to be chosen in case of conflict (Kaushal & Kwantes, 2006; Özarallı, 2015; Özkara & Tunç, 2020; Veerankutty & Rehna, 2020). Therefore, if mediation is desired in schools, the impact of organizational culture on people's mediation attitudes should not be ignored. The importance of organizational culture should be taken into account, as people's commitment and sense of belonging to their institution will also affect their mediation attitudes.

Organizational culture has a mediating role in the relationship between Type 9, Type 8 and Type 1 personality types and mediation attitudes. Here, organizational culture is a full mediator in Type 9 and Type 1, while

organizational culture is a partial mediator in Type 8. Type 9s are people who like to take part in the organization and attach importance to cooperation (Sutton, 2007). Therefore, it can be seen as usual that organizational culture is a full mediator. Type 1s may isolate themselves by holding themselves responsible for doing the job because they think that others cannot do it as perfectly as they do (Riso & Hudson, 2003, pp. 90-91). On the other hand, they are people who maintain their formality in organizations, attach importance to plans and programs, and respect authority (Palmer, 1995). Therefore, high efficiency can be obtained if they are welcomed in the same way in their organizations (McPartlin, 2021, p. 107). Therefore, depending on the perceptions of organizational culture, it can be seen as usual that the organizational culture is a full mediator. In this context, if it is desired to increase the mediation attitudes of personality types, it is important to create a strong and effective organizational culture that will enable personality types to experience satisfaction and use their potential at the maximum level. In the literature, there are studies that cannot fully explain the conflict management styles of personality types and it is thought that variables such as culture may affect the collaborative conflict management style (Erkuş & Tabak, 2009). In this study, in addition to the effect of personality types on mediation attitude, it was concluded that organizational culture also has a mediating effect. Type 8, on the other hand, are people who already have high leadership qualities, who attach importance to ensuring justice and defending the weak (Andre, 2014). Therefore, the partial mediation of organizational culture can be considered normal.

In the literature, there are studies examining the relationship between personality types and conflict resolution methods and concluding that different personality types are associated with different conflict resolution methods (Rahaman et al., 2010; Antonioni, 1998; Tuna & Türkmen, 2015; Yürür, 2009; Yıldızoğlu & Burgaz, 2014; Turhan & Tiftik, 2022). However, trainings on conflict management are ineffective because they ignore the impact of personality. In fact, when a person understands the relationship between personality and conflict resolution, he/she will gain self-awareness, adjust his/her behavior, and learn behaviors that will provide reconciliation (Rahaman et al., 2010, pp. 21-22). In addition, there are studies showing that there is a relationship between organizational culture and integration style, which is one of the conflict solutions and has a similar logic with mediation, which is an alternative solution method (Bağdatlı, 2015; Özkara & Tunç, 2020). Also, Erkuş & Tabak (2009) stated that factors such as organizational culture other than personality may be effective in collaborative conflict management. Therefore, when personality types, organizational culture and mediation are considered together, personality types will have an impact on the person's perspective on the conflict, his/her progress in managing the conflict and getting results, as well as the culture of the organization he/she is in will have an impact on his/her attitude in this mediation. Therefore, in addition to being guided to mediate by knowing the personality types of people, the culture of the organization should also be in a structure that supports mediation in the background and it should enable people to be and live in their healthy personality types, in which they can fully reflect their personality types and realize themselves.

In an age when alternative conflict resolution approaches have increased and become widespread, mediation should be further researched and contributed to the literature. Therefore, more research should be conducted on mediation in work environments with organizational structure. It has been observed that personality types and organizational culture are effective for people to become mediators. In addition, other factors that may be effective in mediation can be investigated. In another study, the sub-dimensions of organizational culture on mediation can also be investigated.

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# Linguistic Skills Development of Adults in Learning English as a Foreign Language: Speaking Skill in Ecuadorian Entrepreneurs

Daleska Zambrano Muñoz<sup>1,2</sup>, Raquel Vera Solórzano<sup>1,2</sup>, Cintya Zambrano Zambrano<sup>1,2,3</sup>,  
Gabriel Bazarro Alcívar<sup>1,2</sup>

<sup>1</sup> Universidad Laica Eloy Alfaro de Manabí.

<sup>2</sup> Social transfer of knowledge project "Proyecto interdisciplinario de alfabetización integral con enfoque de gamificación para el desarrollo sostenible de niños, jóvenes y adultos mayores de Manta"

<sup>3</sup> Research project "Desarrollo profesional docente de los idiomas nacionales y extranjeros de la zona 4 Manabí – Ecuador"

Correspondence: Cintya Zambrano Zambrano. Email: [cintya.zambrano@uleam.edu.ec](mailto:cintya.zambrano@uleam.edu.ec)

## Abstract

This research aims to socialize an educational intervention designed to improve the oral skills of adult entrepreneurs in the province of Manabí, Ecuador. The research is framed in an interpretive paradigm that examines the use of the communicative approach as a method for the acquisition of grammatical content and the implementation of the ECRIF framework to strengthen the communicative competence of entrepreneurs. The post-test was used as the main evaluation instrument, and the results of this study show a significant improvement of 89.23% in the oral skills of the entrepreneurs. It is concluded that through a process of empirical training, integrating theory and practice, the entrepreneurs were able to reach a basic level of content, vocabulary, and grammatical structure through the communicative approach, moreover, the use of the ECRIF framework facilitated the application of this previous knowledge in real-life situations, which contributed in a significant way to the strengthening of speech and oral expression of the entrepreneurs.

**Keywords:** Andragogy, Communicative Approach, ECRIF Framework, English, Speaking Skill

## 1. Introduction

Entrepreneurship is one of the most supported sectors in Ecuador, because it generates employment opportunities for the population in the Canton Manta is characterized for having an interesting flow of international tourists. The cruises' season begins in September and finishes in May every year, receives about 30 to 40 cruise ships with potential buyers of the products generated by entrepreneurs. Thus, entrepreneurs in the tourism sector, require communication in English language. It is a niche of research that need the attention of local educational institutions.

This research work is linked to two projects of Universidad Laica Eloy Alfaro de Manabí (1) Social transfer of knowledge project "Interdisciplinary project of integral literacy with a focus on gamification for the sustainable development of children, young people and older adults of Manta" and (2) Professional Development of English Teachers in Zone 4 of Ecuador.

Andragogy in English language instruction requires to identify teaching strategies to the tourist development in canton Manta, Ecuador. Ambrose et al., (2010, p.3) define learning as the process that leads to change, which occurs as a result of experience and increases the potential for improved performance and future learning. As well, learning can be seen as a cognitive and experiential process through which an individual acquires knowledge, capabilities, understanding or skills in a specific area. It involves integrating new information, changing existing conceptions or enhancing skills through experimentation, instruction, practice or reflection. Robert Slavin (2018) declares learning is the process through which new knowledge, skills, or behaviors are acquired or modified as a result of experience, study, practice, or being taught. It means that learning can occur consciously or unconsciously, in various contexts such as academia, work, social interaction, and daily life. It is a continuous process throughout the human lifespan that can involve the acquisition of academic knowledge, practical skills, values, attitudes, and a deeper understanding of the world around us.

Speaking a language is especially difficult for foreign language learners because effective oral communication requires the ability to use the language appropriately in social interactions. Having in mind that, EFL learners need to have explicit instruction in speaking practice (Shumin, 2002). The research questions to guide this study are:

1. What are the entrepreneurs' expectations for the workshop in EFL?
2. What is the previous English language level of the entrepreneurs at the beginning of the workshops?
3. What topics of the educational intervention in English language were the most difficult to learn for the participants?
4. What is the achievement of the participants in English language grammar after part 1 of workshops?
5. What are the changes in entrepreneurs' English language speaking skill after the part 2 of the workshops?

The aim of this research is to transfer the communicative competence in the English language to the entrepreneurs of Manta.

## **2. Literature Review**

In order to facilitate the understanding of this study, the key concepts are presented below.

### *2.1 Communicative method:*

The style of this research acknowledges the communicative approach as the methodology adopted by teachers and applied to achieve meaningful English language learning in second language students. The communicative approach has been considered the most effective theoretical model for developing speaking skill in English language teaching and learning since the early 1970s. Therefore, it is not only important to learn the linguistic forms, but also to understand the potential of the communicative functions and their social significance.

The main objective of the communicative approach to language teaching is to give priority to the development of learners' communicative competence. Communicative competence refers to the ability to use language appropriately and effectively in real-life situations. The communicative approach aims to go beyond traditional language teaching methods that focus solely on grammatical structures and vocabulary in isolation.

The communicative method according to British Council (2015) can be defined as the didactic teaching of how language is successfully acquired through actual communication. Mordaunt et al., (2019) ratify that the communicative method is able to optimize the way language is taught and used, ultimately perfecting a key aspect of language teaching and learning. Thus, when they are exposed to real communication, their brain automatically activates old or previous strategies in a natural way, and they can use the language with the greatest fluency.



It is argued that priority is given to interaction between participants as a strategy for learning a new language (Luque, 2008). In real communication, participants must manage uncertainty about what the other person will say. (Bahrani & Soltani, 2012), and through their contextualized language activities, develop productive (speaking) as well as receptive (listening) skills during dialogue, in any interlocution position in the social setting (Retreage, 2017, p. 1).

Likewise, Rivera-Fortty (2021) considers interaction as the main source of communicative exchange between a group of people, since it allows the encoding and decoding of ideas, so that the sender can assimilate the message. Thus, it emphasizes the relevance of communicative strategies, focusing on the role of the interaction process, as stated by Compermolle (2015) where most second and foreign language (L2) teachers know that students must have interaction in the development and improvement of their L2 skills.

Therefore, it is important that they practice the language they are learning and, in particular, that they participate in interactions that take place with other learners inside and outside the classroom (Saeed, 2016). Boonkit (2010) highlights that the incorporation of productive skills (e.g., writing and speaking) are very important for the improvement of practical communicative skills. The development of such skills requires the active participation of the teacher and especially the learners' ability, and meaningful interactions.

Biggs (2003) further suggests that active learners are able to achieve a higher level of engagement and thus a higher level of cognitive learning in their academic work. According to Savignon (1991) receivers and viewers are no longer considered passive participants in learning, they are seen as an active party in the negotiation of meaning. The communicative approach combined the important role of the learners and the active participation they have to manage in order to use the language they learn in real life purpose.

## 2.2 *Communicative language teaching (CLT)*

To improve this proficiency, we encourage communication and interaction in language learning. Richard and Rogers (2014) state that Communicative Language Teaching is considered more of an approach, as the aims of CLT are to make communicative competence the goal of language teaching and to develop procedures for teaching the four language skills that recognize the interdependence of language and communication. The essence of CLT is the involvement of learners in communication to enable them to develop their communicative competence. Brown (2009) mentions that this approach to language teaching emphasizes communication as the main goal. It focuses on interactive and meaningful language use, using activities to develop learners' real-life communicative skills.

Communicative language teaching can be understood as a set of principles about the goals of language teaching, how learners learn a language, the kinds of classroom activities that best facilitate learning, and the roles of teachers and learners in the classroom. (Richards 2005, pag. 2).

Berns (1990,104) provides a useful summary of eight principles of CLT:

1. Language teaching is based on a view of language as communication. That is, Language is seen as a social tool that speakers use to make meaning; speakers communicate about something to someone for some purpose, either orally or in writing.
2. Diversity is recognized and accepted as part of language development and use in second language learners and users, as it is with first language users.
3. A learner's competence is considered in relative, not in absolute, terms.
4. More than one variety of a language is recognized as a viable model for learning and teaching.
5. Culture is recognized as instrumental in shaping speakers' communicative competence, in both their first and subsequent languages.
6. No single methodology or fixed set of techniques is prescribed.
7. Language use is recognized as serving ideational, interpersonal, and textual functions and is related to the development of learners' competence in each.

8. It is essential that learners be engaged in doing things with language—that is, that they use language for a variety of purposes in all phases of learning.

Teachers who are familiar with the principles of communicative language teaching gain a more objective view when planning their lessons, and it is also important because it provides a theoretical basis for designing effective teaching practices. It facilitates a communication-centered approach that promotes language acquisition in a contextual and meaningful way. Also, the CLT develop the communicative competence in second language learners.

### 2.3. *Encounter, Clarify, Remember, Internalize, Fluency (ECRIF)*

In this study, we focused strongly on using the communicative method with ECRIF framework. Our main aim is to implement an educational intervention to develop speaking skill by implementing the ECRIF framework as a teaching model.

The ECRIF is a framework system of a way of looking at how students learn a language. (Tosuncuoglu, 2017). ECRIF is a framework for understanding learning, looking at how people learn rather than prescribing what teachers should or should not do. By using this framework, educators can understand the intricacies of successful language acquisition. The primary aim of this approach is not to prescribe specific actions, but rather to provide guidance on effective and ineffective practices. It aims to illuminate the ways in which students can optimise their learning experience.

The key to the ECRIF framework is the *focus on the learning process* that students go through as they work with the target skill or knowledge rather than what the teacher is doing during the lesson. In this way, the teacher plans activities and thinks about the content to service learning in a principled way ((Kurzweil & Scholl, Understanding Teaching Through Learning, 2005).

ECRIF can be used:

- to plan lessons and adapt course book materials = (*reflecting for action*)
- to assess where students are in their learning process during a lesson = (*reflecting in action*)
- to reflect on student learning after a lesson = (*reflecting on action*)

Caiza (2021) her findings showed that “the learners” speaking skills improved when using ECRIF Framework in the classroom”. Cedeño (2022) states that implementation of ECRIF in the EFL classroom may be a positive first step toward incorporating a framework to guide English language teaching and learning under the principles of CLT which attempts to aid learners to become fluent and effective users of the language.

### 2.3 *Meaning of each stages in ECRIF*

The ECRIF framework offers a series of strategies that guide learners through the key stages of the process of developing speaking skills, these stages are five in number and each is the foundation for the other (Kurzweil & Scholl, 2005).

E for encounter: The encounter phase of learning is the first time a learner encounters new material or information. It is the introduction to the new language. In the encounter phase, the learner's prior knowledge is activated and what he or she already knows is discovered (Ramadan, 2019).

C for Clarify: Clarifying is something that happens inside the learner when the learner can determine, for example, a certain meaning or pronunciation of a vocabulary word or use a certain grammatical construction in a certain situation. Of course, teachers help to clarify and check or evaluate the learners' understanding of the material. One way teachers check comprehension is with comprehension check questions.

R for remember (controlled practice): This is the first step in memorizing new material. It is usually characterized by repetition, review, and reference to supporting materials through models or instructions.

I for internalize ("learner-initiated" activities): When a learner internalizes material, he or she transfers it to long-term memory. Learners need continued practice to internalize the new language or information. The type of practice here differs from the recall stage in that it will be freer and less controlled. In this stage, learners make more decisions about how to use the information and rely less on external aids.

F for Fluently Use: In this phase of learning, learners use new material and information fluently, according to their current understanding and internalized assimilation of the material. This is the stage where they freely test their internalized knowledge and spontaneously produce the target language creatively in personal and real-life communication tasks.

### *2.5 The adults as English learners:*

The theory of andragogy focuses on how adult learners learn. Adults have special needs and requirements as learners (Malik & Khaliq, 2017). Andragogy is a learning process which can help adults to develop ideas and needs. Adult learners can be defined as all people above school age (over 25-30 years old) who wish to learn and acquire a second language in order to grow or develop in different work, academic or social environments. According to Cozma (2015) she defines it as people above the normal age of traditional schooling (more specifically, over 23-25 years old), who freely choose to engage in a particular form of instruction, in order to meet a professional, social or personal need or interest.

According to Knowles (1984) Adult learners are distinguished by 6 main characteristics, those characteristics are: (1) Adult learning is self-directed, (2) Adult learning utilizes knowledge & life experiences, (3) Adult learning is goal-oriented, (4) Adult learning is relevancy-oriented, (5) Adult learning highlights practicality, and (6) Adult learning encourages collaboration. Thus, adult learners tend to be more self-directed, because they are able to direct their own learning over time; enriching their knowledge with day-to-day experiences, they are also ready to take on a new social role, they are in the expectation of learning immediately, adults are generally motivated to learn regardless of internal or external factors.

The previous studies related to this research are, the work of Harmer (2007) affirms that adult learners have developed their cognitive capabilities and conceptual complexity more than the younger learners. Cozma (2015) says that adults are certainly more cooperative learners, and what is more important, their cooperation comes as a natural consequence of their seeing the point of the various instructional situations in which they are involved. The salient feature of these adult learners is that additionally, they are more mature and possess more experience than younger learners, although this could be beneficial as well as problematic. Thus, on the other hand, adult learners have better developed strategies and learning styles that the teacher can help them to take advantage of in their learning. Individual adults learn differently, depending upon their experience, aptitude, and attitude.

### **3. Methodology**

This research is based on the interpretive paradigm, which is a reflection from the practice, where the reality is conformed of observables and external facts, by interpretations and meanings elaborated for the individual, through the interaction with the rest of the people within a determined context. In addition, the nature of this research was exploratory, using a **pre-test, survey, contextual observation, and post-test**. The group of participants is made up of 20 entrepreneurs, including people of human mobility and Ecuadorians, all the members of the group are adults, the ages are between 18 and 74 years old. The 85% are female and 15% are male. These people are entrepreneurs from the city of Manta-Ecuador, who work in the tourism sector promoting and selling their own products. It is important to note that each entrepreneur has a unique product, which means that the entrepreneurship differ from one another.

### 3.1. Instruments:

The techniques and instruments for the collection of data were:

English language previous knowledge Pre-Test, which was made based on the topics of A1 level according to Cambridge. It consists in 15 questions that are divided in grammar, vocabulary, and speaking. This test evaluates the previous knowledge of the participants, and it measures if the entrepreneurs can dominate the most basic topics of A1 English level. This instrument was examined and approved by 3 professors of the program pedagogy of national and foreign languages affiliated to the university Laica Eloy Alfaro de Manabí.

**Survey questionnaire:** The aim of this survey is to know the positions and points of view of the entrepreneurs about the English workshop. It consisted of 10 questions about the expectations of the participants concerning to the English workshop. It considers the variables: expectations, additional resources, time availability, and preferences, a google forms questionnaire was used to develop this survey, the time required to fulfill the survey is 15 minutes.

**Checking list of contextual observation:** A checklist was created, based on the themes of the workshop, to identify the challenges and advancements of the participants during the educational process. This instrument was adapted according to the topics of A1 level learners, following the Common European Framework of Reference for Languages. This instrument is used by means of a detailed and clear list of the actions to be evaluated, it was examined, and approved by 3 professors of the program pedagogy of national and foreign languages affiliated to the university Laica Eloy Alfaro de Manabí.

**Post-Test:** At the end of the workshop, participants have a final presentation to assess their English language level as a result of the learning process, to evaluate the impact and effectiveness of the teaching and learning within the educational intervention, making a contrast among the Pre-Test and the final presentation to notice the advancements. This instrument was prepared and evaluated by the workshop teachers, the presentation lasted 10 minutes per person and was used within the classroom where the classes were taught.

### 3.2. Process

This research process consisted of the following stages:

**Stage 1:** In this stage, the participants were selected, adults between 18 and 74 years old. This selection was based on their entrepreneurship, since this project was addressed to people who are part of the tourism sector of Manta.

**Stage 2:** A survey was developed to know about the expectations of the entrepreneurship, because it is important to consider what the participants want and the interests that they have concerning of the workshop.

**Stage 3:** In this stage, the entrepreneurs responded some questions to assess what they already know about English basic topics, as a way to get an idea what information the participants need to learn in classes.

**Stage 4:** During the teaching-learning process was necessary to measure the advancements of the entrepreneurs, for that reason, according to the topics an observation checking list was created to evaluate the progress of the participants, within this check list were the most basic and important topics of the A1 English level.

**Stage 5:** The last stage there was a final presentation, that is consider as a Post Test, this presentation was very important, since in this part the entrepreneurs demonstrated what they learned during all this time. This presentation was a contrast with the Pre Test, because in this part the participants answered the same questions than in the Pre Test, with the difference that in this occasion was orally to see how they have improve their speaking skill, in addition to this interrogations, they gave an explanation of their entrepreneurship, considering descriptions about what they do or sell, prices, and elaboration of the products.

### 3.3. Educational intervention:

This project had an educational intervention that lasted six months divide in two stages, the first one was from November until January, 32 classes were developed by using of the communicative approach, where vocabulary, content and grammatical structures were consolidated, each class lasted 2 hours, and each week a specific topic was covered, where practice and the corresponding feedback were given; and the second stage was from May until

July, in this period of time, 36 classes were taught applying the ECRIF framework to refine the oral expression of the entrepreneurs, the classes were given 3 days per week, two hours each class. This project was conformed by 2 teachers and 20 entrepreneurs. Both entrepreneurs and teachers played an active role in the process, and gaps, doubts and difficulties in the participants' English learning process were identified. For this reason, classes were offered from a basic level covering core and specific topics, specifically designed to meet the participants' work needs using English.

The conducted connection between the two stages in the workshop, where the ECRIF method was selectively applied to the second stage, serves as a crucial experiment to assess the impact of this framework on the development of classes aimed at enhancing the communication skills of the trainees. The deliberate exclusion of ECRIF in the first stage creates a controlled environment for evaluating the effectiveness of this teaching methodology. This approach not only offers valuable insights into the potential positive impact of ECRIF on communication skill development but also underscores the importance of methodological choices in shaping the overall learning outcomes. The findings from this analysis will likely provide valuable information for educators and curriculum designers seeking to optimize language teaching methodologies for the improvement of students' communication abilities.

The main objective is for the entrepreneurs to acquire the necessary knowledge to develop their communicative competence in English, which is why the workshop is divided into two stages.

The first stage focuses on consolidating content, vocabulary, and grammatical structures through the communicative method. Since the participants are adults accustomed to a behaviorist approach based on direct transmission and quantified measurement of learning, it is challenging to change the mindset or processes that they perceive as more effective. A diagnostic test was used first, which revealed that most of the entrepreneurs had no prior knowledge of the language.

The second stage focuses exclusively on the application of the ECRIF framework. Once the participants have acquired prior knowledge, this framework is used to apply this knowledge in practical situations, strengthening pronunciation and speaking skills. As a pedagogical model, ECRIF focuses on the specific needs of the learners and serves as a guide for curricular adaptations.

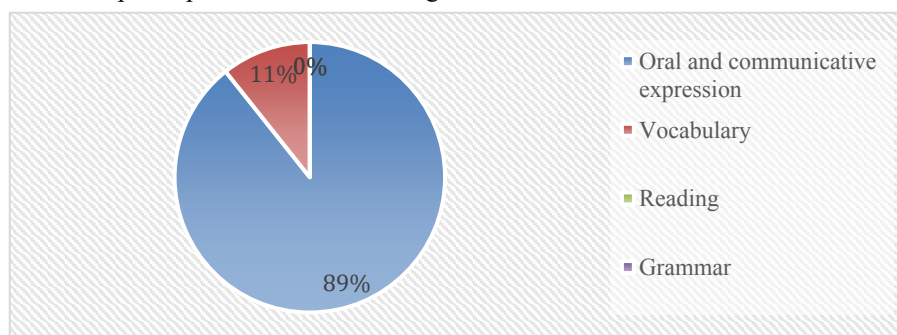
At the end of the second stage of the workshop, a post-test was conducted to evaluate the progress and improvements in the oral skills of the entrepreneurs. A before and after evaluation was conducted from the pre-test to the final presentation (post-test), using the oral presentation as the evaluation method. This approach allows us to determine the effectiveness of combining the communicative method for knowledge acquisition with the ECRIF framework for oral skills development.

#### 4. Results

The results presentation follows the other of the research questions appearing in the introduction section.

##### 4.1 In answer to the question: What are the entrepreneurs' expectations for the workshop in EFL?

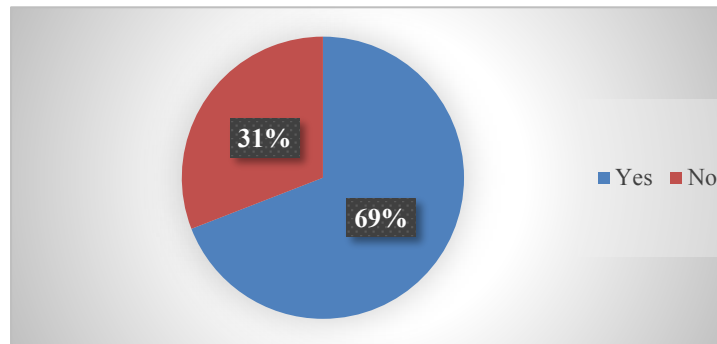
The graphic 1 shows the participants' need for learning in EFL.



Graphic 1: Participants expectations for learning in the workshop

According to the graphic, the 89% of respondents that they would like to improve their communicative and oral expression. The 11% of the participants declared that they prefer to improve vocabulary.

4.1.1. In addition, other of the participants' expectations is to access to didactic material in English language.



Graphic 2: Participants' access to didactic material in EFL

4.2. In answer to the question 2. What is the previous English language level of the entrepreneurs at the beginning of the workshop?

The table 1 shows the results of the participants' previous knowledge in English language.

Table 1: Participants previous English language knowledge

N°	Topics assessed	Knowledge percentage
1	Names and surnames	50%
2	Age	30%
3	Professions	40%
4	Address & directions	10%
5	Frequency adverbs.	10%
6	Personal adjectives.	25%
7	Communication for promotion of products	10%
8	Numbers & prices	20%
9	Welcome the customers	40%
10	Close the business Farewells.	35%
11	American quantity system	25%
12	Location description	20%
13	English for sales	15%
<b>Total</b>		<b>27,69%</b>

Source: pretest of English previous knowledge.

It is observed that the entrepreneurs have a 27.69% command of the fundamental aspects of English, as well as the content and vocabulary related to their businesses or areas of work. The information was used to design the educational intervention.

4.3. In answer to the question 3. What topics of educational intervention in English language were the most difficult to learn for the participants during the execution of the educational intervention?

The table two shows the results of the contextual observations.

Table 2: Participants progress and difficulties in English classes.

Topics of educational intervention	Participants achievement				Observation
	100-75%	74-51%	50-26%	25-0%	
<b>1. Use of INTRODUCE MYSELF</b>	X				The students did not have difficulty using the mentioned topic.
<b>2. Use of GREETINGS AND FAREWELLS</b>	X				Students did not have difficulty using greetings and farewells.
<b>3. Use of SPELLING</b>		X			The students had difficulty using or applying the spelling of the different words presented.
<b>4. Use of FOOD AND DRINKS vocabulary</b>	X				The students had no difficulty using the topic of beverages and food.
<b>5. Use of COUNTABLES AND UNCOUNTABLES NOUNS</b>			X		The students encountered numerous challenges when attempting to utilize and apply the aforementioned topic.
<b>6. Use of ADJECTIVES</b>		X			The students encountered difficulties in applying the subject matter.
<b>7. Use of PROFESSIONS AND OCCUPATIONS</b>	X				The students did not encounter any challenges in utilizing the professions.
<b>8. Use of SELLING AND BUYING vocabulary</b>			X		The students experienced difficulties with the topic as they believed it to be overly complex.

Source: Contextual observations

The topics with the greatest learning difficulty were observed in the entrepreneurs are 5. Use of countable and uncountable nouns, and 8. use of selling and buying vocabulary.

4.4. In answer to the question 4. What is the achievement of the participants in English language grammar after part 1 of workshops?

The table three shows the achievement of the participants.

Table 3: Participants' achievement in EFL grammar after educational intervention

N°	Items	Grammar
1	Names and surnames	95%
2	Age	85%
3	Professions	100%
4	Address & directions	60%
5	Frequency adverbs.	70%
6	Personal adjectives.	80%
7	Communication for promotion of products	75%
8	Numbers & prices	85%
9	Welcome the customers	85%
10	Close the business Farewells.	85%
11	American quantity system	80%
12	Location description	75%
13	English for sales	70%
<b>Total</b>		<b>76.54%</b>

Source: Pos-test part 1

A significant change is observed at the end of the workshop, reaching a knowledge level of 76.54%. This represents an improvement of 48.85%, which marks the difference between their starting point and the state at the end of the first stage.

4.5. In answer to the question 5. What are the changes and improvements in the entrepreneurs' linguistic skills after the educational intervention?

The table four shows the improvements of the entrepreneurs.

Table 4: Participants' achievement in EFL speaking skills after educational intervention.

N°	Items	Speaking skill results
1	Names and surnames	100%
2	Age	95%
3	Professions	100%
4	Address & directions	85%
5	Frequency adverbs.	90%
6	Personal adjectives.	95%



7	Communication for promotion of products	90%
8	Numbers & prices	95%
9	Welcome the customers	95%
10	Close the business Farewells.	95%
11	American quantity system	90%
12	Location description	90%
13	English for sales	95%
<b>Total</b>		<b>89.23%</b>

*Source: Post test part 2*

The results show a significant progress through the application of the ECRIF framework as a method to enhance and improve the oral skills of the entrepreneurs. A final percentage of 89.23% was achieved in speaking skills, highlighting the relevance of vocabulary and content related to their field of work to strengthen their communicative competence.

## 5. Discussion

Based on the literature review and the field work of this research, authors affirm that, results ratify the position of Caiza (2021) and Briones (2022) when they share the idea practical application of the ECRIF framework along with Communicative method in the Ecuadorian classroom is relevant for improving the learners' speaking skills in English.-Thus, the use of ECRIF in this research with entrepreneurs showed significantly improve levels of speaking proficiency by encouraging the spontaneous and accurate expression and use of the language in both practice, teacher-direction, and learner' s production-initiated activities. In addition, teaching adult learners can be very rewarding, but also very difficult, as mentioned by Malik & Khaliq (2017) ratify that adults have special needs and requirement as learners, that is why in this research with adult entrepreneurs, these same demonstrated a slightly higher percentage in the use of the communicative method, and not with the ECRIF, the researchers can affirm that this is due to the learning style of older adults.

Finally, Knowles (1984) labels adult learners with six fundamental characteristics that they do not share with younger learners, these are (1) Adult learning is self-directed, (2) Adult learning uses knowledge and life experiences, (3) Adult learning is goal-oriented, (4) Adult learning is relevance-oriented, (5) Adult learning emphasizes practicality, and (6) Adult learning fosters collaboration. Cozma (2015) in the same way states that they are more mature and possess more experience than younger learners, although this could be both beneficial and problematic, although teachers need to supply them with reasons why each aspect of what they train is important.

The evidence presented shows that a combination of methodologies as communicative method and ECRIF framework had a positive impact on the teaching-learning process during the English workshops in groups of entrepreneurs. This is clearly reflected in the excellent results obtained by the entrepreneurs at the end of the educational intervention. Thus, using the communicative method participants pasted from 27.69% in pre-test to 76.54% (+48.85%) in post-test. Using the ECRIF participants reported 48.08% to 89.23% (+41.15) at the end. In addition, the direct adaptation of the lessons to the business environment, with an authentic and real-life approach, enabled the adult entrepreneurs to express themselves in English confidently and effectively.

For future educational interventions is recommended to incorporate specific approaches, content, and vocabulary related to entrepreneurs' products and business, facilitating effective communication with people who speaks English language, and strengthening their connection in the international market.

## 6. Conclusion

Based on the contrast of the analyzed literature and the empirical research, the authors declare 100% achievement of the proposed aims: to transfer the communicative competence in the English language to the entrepreneurs of Manta. By comparing the effectiveness of teaching based on the communicative approach and the use of ECRIF, it was concluded that the combination of both models promotes higher results in language transference. This integration significantly facilitates the teaching-learning process, allowing students to acquire content knowledge, vocabulary, and grammatical structures in English language, meanwhile improving their speaking skills. This study shows that by the end of the workshop, the entrepreneurs had made an impressive 89.23% progress. In contrast, at the beginning of the program, they had only 27.69% proficiency in the basics. The synergy between the two approaches resulted in a 61.54% improvement in content mastery and communicative competence in English as a foreign language. This result underscores the effectiveness of strategically combining different teaching methods and demonstrates that the synergy between the communicative method and ECRIF. The weakness of this research lies in the limited number of participants during the 6 months of the English workshop, for this reason the results obtained cannot be generalized, since it is necessary to carry out this process at least 3 more times and for a longer period of time to generate a theory. For this reason, other researchers are invited to carry out new investigations in the following line of research: communicative development in the foreign language of entrepreneurs in Manabí. It is hoped that this work will contribute to the socio-economic development of this important sector in Ecuador.

## 7. Acknowledgment

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# Innovative Entrepreneurship Characteristics that Affect the New Normal School Administration of Sarasas Affiliated Schools Administrators

Tassada Songsiri<sup>1</sup>, Anusorn Nampradit<sup>2</sup>

<sup>1,2</sup> Suvarnabhumi Institute of Technology

Correspondence: Tassada Songsiri. E-Mail: svit.nuna@gmail.com

## Abstract

The objectives of this research are to 1) investigate innovative entrepreneurship characteristics of Sarasas Affiliated Schools administrators. 2) inspect of new normal school administration of Sarasas Affiliated Schools administrators. 3) investigate innovative entrepreneurship characteristics that affect the new normal school administration of Sarasas Affiliated Schools administrators and 4) suggest methods to improve those innovative entrepreneurship characteristics that affect the new normal school administration of Sarasas Affiliated Schools administrators. The tools that were involved for this research include content synthesis tables, questionnaires and interview form. Statistics used in data analysis were percentage values, average values, standard deviations, correlation coefficients (Pearson Correlation) and stepwise multiple regression analysis. The results of the research found that 1) innovative entrepreneurship characteristics of Sarasas Affiliated Schools administrators are found high overall. 2) the success the new normal school administration of Sarasas Affiliated Schools administrators is considered high overall. 3) innovative entrepreneurship characteristics are significantly found to affect the success of new normal school administration of Sarasas Affiliated Schools administrators  $R^2 = .640$  at 0.01 significance level. 4) Four factors that would affect the new normal school administration of Sarasas Affiliated Schools administrators are found which 5 approaches regarding risk-taking, 3 approaches to hunger for success, 4 approaches to self-confidence and 2 approaches to innovative thinking.

**Keywords:** Innovative Entrepreneurship Characteristics, New Normal School Administration, Sarasas Affiliated Schools Administrators

## 1. Introduction

Thailand 4.0 is a strategy that aims to change Thailand's economic structure to be "Value-Based Economy" or "Innovation-Driven Economy". Its goal is to change Thailand's economic model from "Do more, get less" to instead be "Do less, get more" according to Thailand's 20-Years National Strategic Plan by improve our internal strength while connecting with the world community. Of which, change of focus from consumer goods to innovation goods, implementation of technology-driven industry, creativity and innovation towards servitization are the three dimensions that Thailand 4.0 aims to change (Suwit Maesincee, 2559: 2).

Moreover, Thailand also must implement these changes onto countless business sectors. Several sectors include technological management among farming sectors (Smart Farming), switching from Traditional SMEs to be Smart Enterprises and Startups, change of Traditional Services into High Value Services and improvements of unskilled labors with knowledge and trainings (Office of the Education Council: ONEC, 2018).

Throughout the past 2 years, coronavirus or COVID-19 that scourge throughout the year 2019-2020 were firstly found to be spreading in China in December 2019. Later, COVID-19 was announced as public health emergency of international concern since 30<sup>th</sup> of January 2020. This pandemic affects human's lifestyle, work behaviors and people's way of working. Working from home, thus, became one major part of our daily lives. It also leads to the introduction of "Work-Life Integration" between the mixture of people's workplace and their personal lifestyle. Furthermore, it also stimulates change in our traditional educational system. E-commerce and online classes also play a significant role, focusing more on education-related personnel including students and teachers' health and security. Adaptation towards "New Normal" is crucial towards a safe education provision and educational institutions are required to adapt to continue the stuttered educational system while preparing for the pandemic (Practical manual for educational institutions to prevent the spread of COVID-19 disease, 2563).

Sarasas Affiliated Schools are firstly founded in 1964 by Professor Piboon and Professor Pensri Yongamol which is an Office of the Private Education Commission subsidiary. The schools offer both English and Thai language education in parallel to each other. They also follow the regulations in the Constitution of the Kingdom of Thailand 1997 Section 81. The regulation provides descriptions of educational supports provided by private schools in order to develop student's diverse skills both technologically and innovatively as aligned with the change in the society.

The Constitution of the Kingdom of Thailand 1997 Section 81 also mentioned the challenges regarding the recruitment of managerial staffs. It highlighted the need of display of responsibility as managerial level employees and the cruciality of innovation development. Moreover, those administrators must have vision, innovative strategies, creativity and proper innovation adoption especially regarding educational quality. The schools must aim to satisfy students, parents and the community with proper educational quality and proper adaptation according to those policies and the stated curriculum (Summary document of the meeting of the Sarasas Affiliated Schools, No. 2/2022).

Due to that importance as mentioned above, this research, thus, aims to focus on the innovative entrepreneurship characteristics that affect the new normal school administration of Sarasas Affiliated Schools administrators. This research would encourage higher educational quality as required given this constantly changing world. All of which could be guidelines towards the new normal school administration to be implemented efficiently.

## **2. Research Objectives**

- 1) Investigate innovative entrepreneurship characteristics of Sarasas Affiliated Schools administrators.
- 2) Inspect of new normal school administration of Sarasas Affiliated Schools administrators.
- 3) Investigate innovative entrepreneurship characteristics that affect the new normal school administration of Sarasas Affiliated Schools administrators
- 4) Suggest methods to improve those innovative entrepreneurship characteristics that affect the new normal school administration of Sarasas Affiliated Schools administrators.

## **3. Research Methodology**

This research has 2 procedures as follows. 1) Investigation of innovative entrepreneurship characteristics that affects the new normal school administration of Sarasas Affiliated Schools' administrators is conducted towards school administrators and teachers under Sarasas Affiliated Schools in academic year 2022. Of which, there are 46 schools with the total of 319 administrative personnel and 5,798 teachers. The sample size is determined using Krejcie & Morgan's Table (Krejcie & Morgan, 1970: 608). Consequently, there are 170 school administrators and 357 teachers qualified, totaling up to 527 participants. Questionnaires with Rating Scale according to Rensis

Likert Methods are used in this 1<sup>st</sup> step and are divided into 4 more parts. The first part of the questionnaire revolves around the participants' general status whilst the second part focuses on their opinions regarding innovative entrepreneurship characteristics among Sarasas Affiliated Schools administrators. Then, the participants' opinions towards the new normal school administration among Sarasas Affiliated Schools administrators are enquired in the third part. Participants suggestions towards innovative entrepreneurship characteristics that affect new normal school administration of Sarasas Affiliated Schools' administrators are collected in the fourth part of the questionnaire. Consequently, those results are synthesized using Descriptive Analysis to identify the similarities and frequencies of those recorded answers.

### *3.1. Research Design*

Several procedures have been considered to develop a proper research methodology. Those procedures include 1) examination of corresponding documents, mindsets, theories and research to generate the questions and 2) questionnaire development to collect suggestions toward the innovative entrepreneurship characteristics and the new normal school administration. The questionnaire consists of 4 parts which are a) checklists about the participants general demographics b) and c) 5-points rating scales to gather opinions regarding entrepreneurship characteristics and success in new normal school management and d) open-ended questions to gather qualitative suggestions. 3) Those questionnaires were later presented to the supervisor and 5 experts for further improvement regarding content validity while calculating the Index of Item Objective Congruence (IOC) that must exceed 0.6. 5) Edit those questions within the first draft of the questionnaire according to those recommendations made by the research supervisor and those corresponding experts. Consequently, the second draft of the questionnaire was resubmitted for recheck. 6) The improved version of the questionnaire was used to undergo pilot test to try out among another group of 30 participants which share some similar characteristics with the samples. 7) Confidence testing were calculated along with Cronbach' Alpha Coefficient of which resulted in 0.984 confidence level which is found reliable for the research. 8) The official questionnaire, then, was printed out for data collection purposes.

### *3.2. Data Collection*

Data collection procedures for this research are as follows. 1) The official letter from the Suvarnabhumi Institute of Technology for Sarasas Affiliated Schools principal is contacted for collaboration and help toward required data collection from Sarasas Affiliated Schools teachers. Of which, Google Forms are used to create the questionnaires and collect the required data regarding innovative entrepreneurship characteristics that affect new normal school administration among Sarasas Affiliated School administrators. 2) The requested letter is then submitted from Suvarnabhumi Institute of Technology along with the Google Form questionnaires to the teachers in those 46 sampled schools and are appointed to be submitted within 1 week. 3) The Sarasas Affiliated School principals are also contacted via phone calls to request reinforcing of innovative entrepreneurship characteristics questionnaire submission. There are 527 responses which accounted for 100% of the sample size. 4) Those responses are, then, revised and rechecked before data analysis.

### *3.3. Data Analysis*

After collecting all the responses, the completion of those responses was checked and later was brought to analyze according to these steps. 1) Each part of the questionnaire about innovative entrepreneurship characteristics and new normal school administration of Sarasas Affiliated School administrators were analyzed separately from each other as described below. 1A) The first part regarding general participant demographics was analyzed through descriptive analysis based on their frequencies and percentages. 1B) The second part about the innovative entrepreneurship characteristics of Sarasas Affiliated Schools administrators includes both the overview and in-depth details of different aspects. Those responses in this part were included to calculate the statistical average ( $\bar{x}$ ) and standard deviation (S.D.). Consequently, those calculations were compared with the Likert Scale (Bunchom Srisa-at, 2013, page 121) 1C) On the other hand, the third part focuses on the new normal school administration. Those responses in this were included to calculate the statistical average ( $\bar{x}$ ) and standard deviation (S.D.). Consequently, those calculations were compared with the Likert Scale (Bunchom Srisa-at, 2013, page 121) 1D) For the fourth part of the questionnaire, suggestions regarding the innovative entrepreneurship characteristics are

collected. Consequently, descriptive analysis and frequency distribution were both used to analyze those qualitative responses. 2) Secondly, the analysis towards innovative entrepreneurship characteristics that affects the new normal school administration of Sarasas Affiliated School administrators require Stepwise multiple regression analysis to identify variables that significantly influence the new normal school administration among Sarasas Affiliated School administrators.

#### 4. Second Step of this Research

Moreover, apart from those questionnaires involved, the second part of this research aims to investigate how to enforce innovative entrepreneurship characteristics that affect the new normal school administration of Sarasas Affiliated Schools' administrators. In-depth interviews were conducted among 9 expert participants selected using purposive sampling technique and were separated into 5 subgroups.

##### 4.1. Research Methodology

For this step specifically, in-depth semi-structured interviews were considered as the main data collection method to inquire about innovative entrepreneurship characteristics that affect new normal school administration of Sarasas Affiliated Schools administrators. Of which, the set of questions were predeveloped open-ended and were flexible accordingly to be able to probe deep insights. Prior to the semi-structured interview, documents, books and research revolving around semi-structured interviews were reviewed before conducting interviews with 9 experts in this field.

##### 4.2. Data Collection

In-depth semi-structured interviews are conducted with 9 experts to gain insights for this research. The procedures are as follows. 1) Official letter from the Suvarnabhumi Institute of Technology is requested and are sent to 9 participants selected through purposive sampling technique. The letter was used to contact and appoint participants for the interviews regarding innovative entrepreneurship characteristics that affect the new normal school administration by Sarasas Affiliated Schools administrators. 2) Interviews were appointed along with the participants preferred date, time and location. 3) Those interviews were held privately one-on-one at the date, time and location as specified. Of which, the interview guidelines were submitted prior to the interview for participants to prepare themselves.

##### 4.3. Data Analysis

Consequently, after those interviews, the responses from participants were summarized through the Content Analysis method.

#### 5. Result

The results from the study regarding innovative entrepreneurship characteristics that affect the new normal school administration by Sarasas Affiliated Schools administrators can be summarized as follows.

1. The result regarding innovative entrepreneurship characteristics in Sarasas Affiliated Schools administrators.

Table 1: Display of each aspect's description, its average score, standard deviation, importance and ranking of innovative entrepreneurship characteristics in Sarasas Affiliated Schools administrators. (n=527)

	Innovative Entrepreneurship Characteristics of Administrators	Assumption/Actual		Importance	Rank
		$\bar{x}$	S.D.		
1	Risk-taking	4.16	0.67	High	4

2	Hunger for Success	4.23	0.66	High	2
3	Self-Confidence	4.25	0.65	High	1
4	Innovative Thinking	4.17	0.64	High	3
Overall ( $X_{tot}$ )		4.20	0.65	High	

As displayed in table 1, the overall innovative entrepreneurship characteristics in Sarasas Affiliated Schools administrators are found high ( $\bar{x}$ = 4.20, S.D.=0.65). When considering each characteristic individually, self-confidence traits is found highest ( $\bar{x}$ = 4.25, S.D.=0.65). Similarly, the average of every other aspect span within the range of 4.16 to 4.23 which are considered high as well.

## 2. The result regarding the new normal school administration of Sarasas Affiliated Schools administrators

Table 2: Display of each aspect's description, its average score, standard deviation, importance and ranking of new normal school administration of Sarasas Affiliated Schools administrators. (n=527)

New Normal School Administration	Assumption/Actual		Importance	Rank
	$\bar{x}$	S.D.		
1 Curriculum Management	4.13	0.66	High	6
2 Staff Development	4.27	0.64	High	2
3 Teaching Management	4.34	0.58	High	1
4 Evaluation Methods	4.24	0.61	High	4
5 Feedback Acceptance from Staffs, Parents, Students and Society	4.26	0.68	High	3
6 Resource Management	4.16	0.67	High	5
Overall ( $Y_{tot}$ )	4.23	0.65	High	

From Table 2, the overall level of New Normal School Administration in Sarasas Affiliated Schools administrators is found high ( $\bar{x}$ = 4.23, S.D.=0.65). When considering each aspect individually, Teaching Management aspect is found highest ( $\bar{x}$ = 4.34, S.D.=0.58). Similarly, the average of every other aspect span within the range of 4.13 to 4.27 which are also considered high.

## 3. The results regarding innovative entrepreneurship characteristics that affect the new normal school administration of Sarasas Affiliated Schools administrators

Table 3: Multiple Regression Analysis of innovative entrepreneurship characteristics that affect the new normal school administration of Sarasas Affiliated Schools administrators.

Innovative Entrepreneurship Characteristics Variables	New Normal School Administration of Sarasas Affiliated Schools administrators.				
	b	S.E.b.	$\beta$	t	p
Coefficients	.828	.112		7.378**	.000
Risk-taking ( $X_1$ )	.170	.040	.185	4.261**	.000
Hunger for Success ( $X_2$ )	.213	.041	.236	5.206**	.000



Self-Confidence (X <sub>3</sub> )	.099	.042	.112	2.358*	.019
Innovative Thinking (X <sub>4</sub> )	.329	.040	.361	8.220**	.000
$r = .801$ , $R^2 = .642$ , $\text{Adjust } R^2 = .640$ , $\text{SE}_b = .295$ , $F = 234.410$ , $p = 0.000$					

\* refers to .05 statistical significance level \*\* refers to .01 statistical significance level

From the depicted table 3, multiple linear regression of variables was analyzed to identify correlated variables that influence innovative entrepreneurship characteristic that affect new normal school administration in Sarasas Affiliated Schools administrators. When those 4 mentioned variables were involved in the analysis to identify their correlations, the model comprised of those variables were found to be 64% accurate ( $R^2 = .640$ ). Consequently, when considering the Beta value, it is revealed that independent variable that can predict the level of success regarding new normal school administration by Sarasas Affiliated Schools administrators at .01 significance level are Innovative Thinking (X<sub>4</sub>) (Beta = .361), Hunger for Success (X<sub>2</sub>) (Beta = .236), Risk-taking (X<sub>1</sub>) (Beta = .185). Conversely, self-confidence trait (X<sub>3</sub>) (Beta = .112) were an independent variable that can forecast the level of success regarding new normal school administration by Sarasas Affiliated Schools administrators at .05 significance level. Those variables can be used to develop a mathematical equation as follows.

Innovative Entrepreneurship Characteristic That Affects New Normal Schools Administration by Sarasas Affiliated Schools Administrators Forecasting Equation (Raw Score)

$$Y = a + b_2.X_1 + b_3.X_2 + b_1.X_3 + b_4.X_4$$

$$Y = 0.828 + 0.170 (X_1) + 0.213 (X_2) + 0.099 (X_3) + 0.329 (X_4)$$

Innovative Entrepreneurship Characteristic That Affects New Normal Schools Administration by Sarasas Affiliated Schools Administrators Forecasting Equation (Standardized Score)

$$\hat{Z}_y = \beta.Z_1 + \beta.Z_2 + \beta.Z_3 + \beta.Z_4$$

$$\hat{Z}_y = 0.185 (Z_{X_1}) + 0.236 (Z_{X_2}) + 0.112 (Z_{X_3}) + 0.361 (Z_{X_4})$$

4. Results regarding methods to improve those innovative entrepreneurship characteristics that affect the new normal school administration of Sarasas Affiliated Schools administrators.

1) According to the findings, there are 5 possible ways to improve risk-taking characteristics as follows: 1.1) Encourage knowledge, skills and experience improvement through seminars, courses and self-development campaigns to offer deeper prediction of different negative consequences and possible risks. 1.2) Offer staff opportunities to explore and tackle tasks that have never been experienced before. Some actions that could be taken includes providing full responsible towards small to large projects while providing different possible environment to replicate real-life scenarios as possible such as funding, people management, success, failure and risks. 1.3) Develop a risk management plan to assess and use as guidelines towards risk assessment that does not exceed the administrators' skills. 1.4) Analysis of strengths, weaknesses, opportunities and threats towards the school to determine plans while raising quality to be satisfied and accepted by the society. 1.5) Sets of events, regulations and plans should be set such as action plans, managerial structure, guidelines, responsible personnel, follow-up assessments and trust-building meetings 2) Conversely, there are 3 possible actions that could be taken to increase the hunger for success factor as highlighted from the interviews. 2.1) Clearly set milestones and targets for a clear and determined start of educational business operations. 2.2) Set a unique value proposition that a school or an academy would focus on differentiating from competitors. Moreover, considering marketing strategies such as branding, and reputation building would also be crucial as those mentioned strategies would allow prioritization on attracting skillful students, sales improvements and alumni networking. 2.3) Operate educational businesses with high patience and determination both physically and mentally to achieve set milestones and goals. 3) Similarly, self-confidence can also be developed through 4 actions which are 3.1) Skill and knowledge development through activities, seminars and meetings must be considered, encouraged and supported. 3.2) Opportunities must be taken and learned through challenging tasks while daring to think, act and decide. All of which would create a space for people to exchange knowledge and skills with each other. 3.3) Encourage

teamworking environment and trust-building among collaborators. 3.4) Be an example by starting to exhibit self-confidence while displaying its cruciality towards required team-leading situations so subordinates can deliver results with quality and success. 4) Lastly, as identified from the responses, 2 suggestions to improve Innovative Thinking emerge as follows: 4.1) Develop a proper and suitable environment, encourage staff and develop teachers to be creative and innovative until continuous improvement in working and thinking process are noticed. 4.2) Give chance for people to exchange life lessons, experiences and stories in form of a discussion meeting or networking.

## 6. Result Analysis and Discussion

This research aims to understand innovative entrepreneurship characteristics that affect new normal school administration by Sarasas Affiliated Schools administrators. Of which, the findings have revealed opinions made by administrators and personnel regarding different aspects which influence innovative entrepreneurship characteristics that affect new normal school administration by Sarasas Affiliated Schools administrators. Those results would encourage development and plans to improve educational institution administration quality among Sarasas Affiliated Schools administrators. There are, however, several points that need to be highlighted as follows.

The level of innovative entrepreneurship characteristics in Sarasas Affiliated Schools administrators were found to be high as reported by administrators and the teaching personnels. Of which, self-confidence was found highest while risk-taking were instead found least compared to other traits.

The innovative entrepreneurship characteristics in Sarasas Affiliated Schools administrators according to the responses made by participants including administrators and teachers were found high overall when considered. The characteristics regarding self-confidence were found highest while risk-taking traits were found least.

Regarding self-confidence ( $X_3$ ), this specific characteristic includes the confidence to speak, act and differentiate were found with the highest average compared to the 4 other characteristics. The reason behind this might be due to their personal behavior that develops their self-positivity, self-assertiveness and self-dependence. Consequently, those behaviors lead them to be proud and value themselves. Interviewed experts have mentioned that they could tackle challenges, adapt accordingly with their own skills. They also mentioned that self-assertiveness and adaptability are crucial traits that are required by administrators nowadays to achieve success. Clear expressions also help administrators to convey mindsets, maintain relationships and make decisions effectively. Moreover, it also speeds up the time required to adapt their businesses according to the market demands and technological advancements. As a result, their business would still be in the competition while allowing administrators to accept changes, introduce solutions and acquire opportunities simultaneously. Those effects would ultimately lead administrators to maintain their service quality, tackle challenges while shaping their visions to be reliable in the end. As mentioned by Ekkarat Chankrung (2011) in his study regarding assertiveness among gymnasts and their coaches' techniques to build confidence, assertiveness and adaptability are keys to success. The study has also revealed that self-confidence refers to how assertive and independent a human is, leading to self-proudness, self-valuation and adaptability.

Regarding the risk-taking traits ( $X_1$ ), this study has considered 5 sub characteristics 2.1) Understanding the perspectives from that of parents and societies' expected innovation development to stimulate practical changes. 2.2) The belief that the opportunity to achieve success comes with risks and consequences. 2.3) The ability to gather information and lessons learned from past success or failure to use sensibly. 2.4) The ability to identify current problems and challenges while making decisions decisively to test and learn from those possible failures. 2.5) Encourage personnel and staff to be confident to make decisions when there are risks so they can experience and learn from those possible failures. This characteristic specifically has the least average value. The reason may be due to the possible decisiveness under the unpredictable circumstances that can influence successful and failed measures through unwavering efforts towards success. Risks in these scenarios could be categorized as the risks regarding unbeknownst consequences, risks regarding asset utilization towards a business and the risks associated with loans. The latter involves the nature of uncertainty as the entrepreneur must assess risks not to exceed their own capabilities. Moreover, they must understand how to manage risks as there are numerous exhibiting

methodologies to counteract those risks. They also have to encourage voluntary involvement in business activities and transactions that are unable to predict whether will they result in a success or failure. Those transactions might involve risks such as possible damage, leakages, contaminations, depreciations and unexpected events that might affect a business's intended success. Those mentioned consequences from risks will be an indicator of overall risks as mentioned by Sawee Wongchaiya (2017) regarding the influence of marketing strategies and the entrepreneurial characteristics of towards successful SMEs. The risk-taking characteristic could be categorized into 3 subthemes which are risks regarding the lack of knowledge, risks towards asset utilization and the risks associated with loans. All of which are related to the evasion of uncertainty.

Regarding the scores of new normal school administrations by Sarasas Affiliated Schools administrators according to the staff and personnel, the analysis has revealed that overall quality was found high. However, when considering each of those traits according to the average value, teaching management towards new educational normal is found highest while curriculum management in new educational normal is found least. Those results could be interpreted as follows.

There are 4 considerable points towards teaching management (Y3) in the context of this research. 2.1.1) Firstly, involvement of a wide variety of media such as seminars or videos along with a discussion session to exchange experiences and knowledge among students or teachers is encouraged. 2.1.2) Benefit encouragement through a development session to improve students and personnels is a must in these new normal school administrations 2.1.3) It is crucial to encourage teachers to design teaching strategies according to the needs of students while involving recreational activities. 2.1.4) Support for teachers to offer self-learning opportunities for students to expand their knowledge as appropriate is needed. The provision of self-learning opportunities for students is found to have the highest average score compared to the other points. Of which, the reasons might be due to the need to adapt their educational mediums and teaching procedures under new normal circumstances to maximize efficiency. Moreover, school administrators must also consider new teaching methods such as consideration of new assignments etc. It is also crucial to involve both on-hand and online to appropriately manage learning opportunities. One possible action to consider is giving teachers more freedom to provide appropriate content and technological adoption to encourage real-life applications and understanding. Most importantly, the educational contents must align with the set targets, inspirations and the current social contexts. These actions will allow students to discover newer mindsets while enjoying their learning journey. Of which corresponds to the study conducted by Natthaphat Bunket (2022) regarding learning management in new normal context to expand educational opportunities among primary schools in Sukhothai are 2. The mentioned study has found that learning management with consideration of both on-hand and online assignments by having both physical assignments and hybrid teaching methods would suit best among students. Those actions would also give teachers more freedom and flexibility to develop learning content appropriately while adopting technology to help develop understanding among students. As a result, it would influence creative exploration and knowledge sharing in these new normal education circumstances filled with enjoyment, fun and safe learning experiences.

In this research, there are 5 main considerations regarding curriculum management under new normal circumstances (Y1). 1) Curriculums should be adapted for students to be able to apply them accordingly, especially under these new normal circumstances. 2) Consideration of contents which focus on student development while achieving of what to be known must be done. 3) the main curriculum structure must be organized, considering the diversity of students and the context of the local school environment. 4) promotion and support must be included in the collaborative network involving all sectors to design the curriculum. 5) The curriculum management must be flexible while emphasizing the development of outcome-based education (OBE). Of which was found with the least average value. The reason behind the staggering results might be due to 1) The school should arrange meetings with teachers and staff to ensure proper curriculum preparation. It should be developed according to the situation, necessities, what needs to be known, and what should be applied based on the circumstances. This adaptation should consider new learning methods or adjustments to the school curriculum in accordance with the Ministry of Education's policy for educational management in the New Normal learning format. 2) The school should use a flexible, adaptable curriculum based on the core educational framework. It should be relevant, cover essential knowledge, and align with new learning methods for small-scale schools. This curriculum should also support teachers and staff in effectively performing their duties. 3) The school should be continuously overseeing,

monitoring, and evaluating progress. The school should import and prepare data on teaching outcomes. This data should inform curriculum management, particularly in the context of the New Normal learning format, which involves refining and adjusting the curriculum structure to be adaptable. Essential content aligned with age-specific standards should be provided to assist teachers in planning appropriate lessons. Schools should also develop a curriculum that focuses on students and diverse ways of teaching. This helps students take part in planning their learning. Teachers should make lesson plans easy, encourage students to learn on their own based on what they like, and add useful activities that boost knowledge. Those suggestions and results were found to align with the research by Rangsan Promma, Sai Rung Thita, Pai Rattanachuvong (2020), studying educational management approaches for the New Normal learning in small-scale schools under the Chiang Mai Primary Educational District Office 3. Of which, the study's findings can be summarized as follows: 1) Schools should hold meetings with teachers and staff involved to understand how to make the curriculum. Thus, requiring continuous adaptability by knowing what's important, using it for the new normal learning and applying them according to the New Normal learning as introduced by the Ministry of Education's policies for educational management in the New Normal. 2) Schools should use a newly created curriculum based on the basic education framework. This curriculum should be adaptable, allowing adjustments by reducing measurements, adjusting subject structures, and content to fit the situation's context and necessities. It should cover what's important, adapting to the new way of learning in small schools, making it clear and supporting teachers and staff in their work. 3) Schools should have their administrators guiding, overseeing, monitoring, and evaluating progress and lastly, 4) Schools should collect and compile teaching and learning management reports to evaluate curriculum management outcomes.

## 7. Suggestions

From the study regarding innovative entrepreneurship characteristics that affect the new normal school administration of Sarasas Affiliated School administrators, it is suggested that.

From the research findings, it was observed that the entrepreneurial characteristics regarding risk-taking showed the lowest average score. To address this, management should promote:

1. Cultivating a learning culture: Encourage a culture where learning from mistakes is supported, avoiding blame but instead fostering analysis and solutions.
2. Creating a safe space for experimentation: Establish an environment where employees feel confident to experiment without fear of negative outcomes.
3. Providing guidance and sharing experiences: Offer advice and share decision-making experiences, emphasizing learning from errors.
4. Supporting analysis and improvement: Aid in identifying and rectifying mistakes to prevent recurrence.
5. Allocating necessary resources: Provide budget, equipment, or specialized personnel required for experimentation and improvement.
6. Encouraging positive responses to experimentation: Instill confidence in experimentation and learning from errors, showcasing their value in organizational development. By promoting these aspects, management can empower staff to make bold decisions in risky situations and efficiently learn from the organization's operational experiences.

Moreover, it was evident that the school administration by Sarasas Affiliated School administrators regarding curriculum management had the lowest average scores, specifically in managing flexible curriculum aligning with Outcome-Based Education (OBE). Consequently, the management should promote:

1. Clear goal setting: Assisting in defining goals and desired outcomes for the OBE curriculum, offering guidance and useful information to the teaching team and curriculum designers.
2. Staff development support: Supporting teachers and staff in developing skills and knowledge relevant to OBE through training and beneficial information.
3. Reviewing and evaluating: Supporting the review and evaluation of OBE curriculum usage to ensure expected outcomes are achieved.
4. Enhancing communication efficiency: Supporting communication within the teaching team and providing clear information to students about OBE curriculum goals and outcomes.
5. Collaboration with stakeholders: Encouraging contact and collaboration with relevant stakeholders to provide students with practical professional experiences related to OBE curriculum.
6. Curriculum review and improvement: Supporting the review and enhancement of OBE curriculum to ensure its continued suitability and relevance. By promoting these aspects, management can effectively implement OBE curriculum leading to desired outcomes.

Thirdly, it was found that the innovative entrepreneurial characteristics that affect new normal school administrations by Sarasas Affiliated Schools administrators had a total of four dimensions. Among these, the

variable with the best predictive power was innovative thinking. Therefore, promoting and maximizing these factors should be at a high to maximum level to significantly influence the management of new educational paradigms across various aspects.

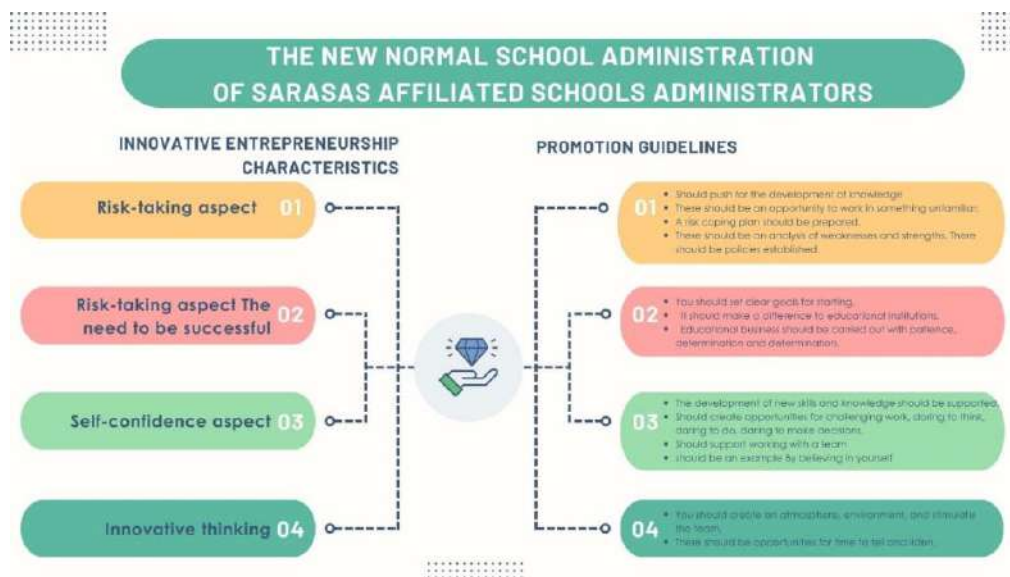
Lastly, Sarasas Affiliated Schools and other private institutions should incorporate the research findings on promoting innovative entrepreneurial characteristics into their developmental strategies for managerial qualities.

## 8. Directions for future research

1. Action research could be studied on top of this research foundation regarding innovative entrepreneurship characteristics that affect the new normal school administration of Sarasas Affiliated Schools administrators. Of which would introduce solutions while continuously improving innovative entrepreneurship characteristics among Sarasas Affiliated Schools administrators.
2. Further research should be conducted to develop indicators of innovative entrepreneurial characteristics for further application and development.
3. Future research could focus on how to develop innovative entrepreneurial characteristics of school administrators in the digital age to further expand these findings regarding new normal school contexts.

## 9. Implications

In this research, the researcher has studied relevant documents, concepts, and research on the characteristics of innovative entrepreneurship and the new school normal administration. Consequently, data and that knowledge are synthesized prior to data collection through interviews. As a result, the guidelines to promote innovative entrepreneurial characteristics that affect the new normal school administration of Sarasas Affiliated Schools administrators are introduced as shown in Figure 1.



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# Adult Educators' Views on Effective Mentoring in Greece: A Qualitative Study

Iosif Fragkoulis<sup>1</sup>, LEMONIA Stavlioti<sup>2</sup>

<sup>1</sup> Professor, Hellenic Open University, Greece

<sup>2</sup> Educator, Ministry of Education, Athens, Greece

Correspondence: LEMONIA Stavlioti, Zagoriou Street No 4, Athens 13451, Greece. Tel: 3-2102315805  
E-mail: eleni.stavlioti@gmail.com & mostavli@gmail.com

## Abstract

The aim of the present research is to record and investigate the views of the adult education educators on the effectiveness of the use mentoring in their pedagogy. The effectiveness is expressed in terms of the expected outcomes of the adult education process, as these are defined by the participants: occupational/professional, personal, and educational. A dynamic model of mentoring effectiveness is designed and applied in a qualitative research frame. More specifically a methodological tool for semi-structured interviews is used to 15 interviewees that formed a representative sample of adult educators. The transcribed texts collected were analyzed through content analysis. This analysis showed that the participants gave special importance to the need that the application of mentoring in adult education should be established and well organized. Even more, the effective characteristics of the mentoring variables were identified as well as the way they contribute to the effectiveness of adult education by using appropriate practices (cooperative and experiential) and adapting goals towards the improvement of the mentees. The complication of the mentoring process is pointed out in the research, as well as the importance of the participants' roles, especially within the increased demands and difficulties of the contemporary society.

**Keywords:** Mentoring, Adult Education, Effectiveness, Contemporary Society, Qualitative Study

## 1. Introduction

The idea whether the adult education programs should include curricula and methodological room for the application of mentoring practices has been discussed upon by academics and policy makers around the world. Due to the technological, scientific, and socio-economic radical changes of nowadays, societies and individuals are forced to continuously adapt in a creative and effective way (that is a way that achieves that goals set at the higher level). Within this frame, mentoring has become a special field of investigation for a plethora of researchers. In Greece, the rather limited, but steadily rising number of studies leads to the necessity of applying mentoring at all levels of typical and not typical education lifelong. The importance of mentoring for both primary and secondary education was formally acknowledged by Greek policy makers in 2010 with specific legislation, according to which a more experienced educator leads a younger and inexperienced educator a his/her mentor. The Greek educators initially faced the mentoring establishment with disbelief (Kokkos, 2007) because they

thought that it would be related to their evaluation, an issue that had negative connotation for them. However, as policy makers started to give recognition to the effective use of mentoring and educational scientists emphasized the importance of the application of mentoring in adult education programs (Ehrich, 2013; Rogers, 1999) this has become a vital issue in the programming of effective adult education courses not only abroad, but in Greece as well (Valkanos, Papavassiliou-Alexiou & Fragoulis, 2009; Valasi, 2015).

The main goal of this paper is to explore the effectiveness of the adult mentoring courses and programs offered by the Greek adult education institutions/establishments; it aims to achieve this through the investigation of the adult educators' views. Within this framework, the paper expects to identify any issues of special importance for the effective application of mentoring as well any weaknesses in the application of mentoring in adult education. Finally, the study expects to be able to provide suggestions for improvements in the provision of adult education through mentoring. The results of the study are expected to throw light on the application of mentoring by the Greek adult educators and assist the policy and educational actors involved in taking initiatives for the betterment of adult education through mentoring.

To achieve the above, this paper aims to study the following:

- The theoretical approaches to mentoring, the description of the main roles of the people involved (mentors and mentees) and the expected outputs of the use of mentoring in adult education.
- The model of dynamic effectiveness (Greemers & Kyriakides, 2010) that is adopted and used in this study; the reasons of its adoption and the concepts, roles, and relations/interactions within this model.
- Learning gain by the mentees regarding the expected outcomes of mentoring that refer to their personal, educational, and professional development.
- The institutions that provide adult education programs, their assistance, and their contribution to effectiveness.
- Problems and other issues noted by adult educators regarding mentoring.
- Proposals that the participants offer to achieve improvements in mentoring.

## **2. The application of Mentoring in Adult Education**

Lifelong learning and especially adult education are basic fields of mentoring implementation, a situation that leads to the need for the expansion and deepening of the specific research field; most specifically regarding the role of the educators/mentors. The present research contributes to the above through the investigation of the views of adult educators on the effectiveness of mentoring, using qualitative research in the application of semi-structured interviews on a selected sample of adult educators; it provides a useful and holistic and dynamic frame for the relevant study's application. This study's contribution is innovative covering a research gap, regarding the formulation of a model of adult education effectiveness, especially in the case of Greek adult education. It is expected to show ways of improving all the stages of mentoring application (inputs, process, outputs). The isolation and description of the interactions and appropriate adjustments of the aims of adult education courses and other issues, may form the basis for the categorization and description of the specific data with the goal of formulating a frame for future studies aiming the improvement of all benefits of mentoring (Lauphlin & Yopp, 2006; Reinstein, Sinason & Fogarty).

The concept of mentoring has its roots in ancient Greece, the name of the wiseman Mentor, to whom, according to Homer, Odysseus trusted the guidance, advice, and education of his son Telemachus. Nowadays, this type of guidance and education is called mentoring (after the name of Mentor); however, there is not only one common definition of the term used, although its meaning is usually close to the concepts of "guidance", "coach", and "advice" (Gabel-Dunk & Craft). Gradually and since 1980, the concept of mentoring has started to adjust to the needs of the contemporary society. In the USA, a strict mentoring framework was developed and applied to by the mentor (a carrier of influence for the students) to the mentees, not only in the field of education, but in industry as well (Zachary, 2000). In Europe, the role of the mentor as a strong guide was clearly separated from that of the mentee (Valasi, 2015). It has been, generally, supported that a mentor advised, and guided within the learning model they used (Strong & Baron, 2004).



It is noted that a common idea across the definitions of mentoring is the hierarchical relation that exists in the effective provision of useful knowledge and the cultivation of competences (personal, educational and professional) by the educator/mentor to the student/trainee/mentee. It is often mentioned by scholars that the students participating in an adult education course seek for learning experiences that would deeply and positively affect them and contribute in allowing them to be a more reflective, and effective person, learner and professional (Nilsen & Driel, 2010). Theoretical knowledge acquired through proper mentoring processes should be blended with real life working experiences in such a way that could affect the mentee-student's career and advancement (Klinge, 2015; Iqbal, 2020). A review of the literature offers evidence that several researchers- using a wide range of methods and techniques -mostly quantitative- have explored mentoring application; some referred to the importance of the idea that the learning processes should be participatory, cooperative and holistic (Kokkos, 2008; Trotter, 2006).

### *2.1. The Importance of Investigating Mentoring in Adult Education- The Significance of the Study*

Lifelong learning and especially adult education are complex and, therefore, they need to be explored in an expanded holistic framework and through the deepening the specific research field. In this sense, the field of educational effectiveness is useful in providing a holistic and dynamic educational/learning model, which can be adjusted to mentoring in adult education (Greemers & Kyriakides, 2010); more specifically in investigating the role of the educators/mentors in relation to the students/mentees and towards the outcomes of the mentoring process. There is a limited literature of such a poly prismatic dynamic kind; the present study aims to contribute to the field of mentoring by formatting such a special adult education effectiveness model; this is accomplished through the study of the views of adult educators on the effectiveness of mentoring; as a result, it may provide a useful frame for specific studies' application. This is innovative contributing to the covering of an existing research gap, especially regarding Greek adult education. This study is expected to show ways of improving all the stages of mentoring application (inputs, process, outputs). The isolation and description of the interactions and appropriate adjustments of the aims may form the basis for the formatting and categorization of specific data with the goal of specifying modeling for the betterment of the effectiveness of mentoring (Ehrich, 2013; Lambropoulos et al., 2022). Especially in Greece, there is a need for a further and deeper study on mentoring; mostly through the mentors' views in the variety of institutions (concerning their type and the place they operate) that provide adult education.

On the above basis, several theories on adult learning have been developed and is vital that the study refers to the most influential ones; this is imperative, given the fact that the way that mentoring is applied is influenced by the theoretical framework primarily used (Kamarudin et al., 2020). It is expected that when the adult educators participating in the study are interviewed, they will express more openly their views on the learning through mentoring and assist in modelling its effectiveness. This is the reason that the main adult learning theories are presented below. They might inform the research process as well as the presentation of the research results.

### *2.2. Theoretical dimensions of adult learning and mentoring*

Kolb (1984) used, the called circle of learning, which circle, as this paper admits, reflects better the aspects of mentoring examined. The four stages that Kolb describes are based on experiential learning and critical reflection that could lead to the deepening and the expansion of scientific thought (Kokkos, 2008). In the theory of Kolb, the role of learning experiences and critical reflection in a continuous circle of the effective learning, and the promotion of the individual and social development. We consider that the theory of Kolb is closer to our model of dynamic effectiveness; however, several issues from other theories may influence its application.

The theory of social change for adult education by Paulo Freire is connected to those of Peter Jarvis and Jack Mesriow mostly regarding the central role that transformative learning has in autonomous thought as well as in the expected effective practice and everyday problem solution (Koulaouzidis, 2008; Kokkos, 2008; Valkanos, Papavasiliou-Alexiou & Fragoulis, 2009); issues that could be of special importance in our study. Freire believes that the adult educator supports the collaboration and the dialogue by using specially constructed educational materials, and by operating as a companion (mentor) to adult students; Jarvis's theory is considered complex as it

stresses the social scope of adult education (Luna & Guilen, 2011), within which the adult educator acts as a transmitter of the existing value-cultural system; the learners connect this system to their experiences as well as to the influences of their specific environment. Jarvis points out that adult educators should be effectively trained to apply a supporting Socratic method in teaching (Valkanos et al., 2009).

Mesirow's theory is a critical theory of transformative learning, within which the way that knowledge is constructed is searched. Mesirow thinks that the adult educators are responsible for the way that adult students face the social and cultural dimensions of life that may bring difficulties and obstacles to their studies. Useful to our study is the reference to Knowles' views that are completed by Roger's work, which are related to the special characteristics and the needs of the adult learners. In summary these are related to the need to know, which is connected to their self-esteem, their experiences, and their readiness in reference to their motives. Knowles created the Andragogy model for adult education, which is very popular in the field (Valkanos et al., 2009).

A lot of theoretical work was done in the field of adult education, which was gradually applied to mentoring and the roles of the participants (mentors and mentees), especially in formatting the mentoring relationship in learning. The researchers use a reflective way to involve, for example, Kolb's circles of learning with the other theories in adult learning, as well as the findings of Psychology (Kolb et al., 2006). In such a framework, mentoring is considered a professional activity that could be modeled to relate to effective adult learning.

### *2.3. Empirical Dimensions of Mentoring and Relevant Research*

A short reference to the most related to the present study's field is made in this section. Gallacher (1997) examined the qualifications of a good mentor concluding to the following: a) increased teaching experience, b) relevant scientific/pedagogic background, c) competence in using ICT, d) experience in innovative projects, and e) knowledge of the culture and special circumstances in adult teaching and mentoring. Other researchers (Athanasoula-Repa, 2017; De Mers, 2014; Loretto, 2017; Peretomode & Ikoya, 2019) focus on what they call "effective mentor" and point out the following characteristics: a) the willingness and ability for the transmission of values, knowledge and experience, b) confidence to the abilities of the mentee to learn, c) access. d) flexibility, e) willingness, f) honesty, g) obtain creative feedback, and h) objectivity, empathy, and positiveness to the mentee. Recent research searched for the identification of the stages of an effective mentoring process and the most popular are investigation of the professional, personal, and educational needs of the mentees, search for the factors of effective mentoring relation as well as for the activities and themes for discussion (Iqbal, 2020; Klinge, 2015; Krishnamurthy, 2021). Special research emphasis is given to the ways of facing any obstacles (Athanasoula-Repa, 2017), as well as to the last stage of reflection and formation of the benefits that the mentees acquire (Phillips & Fragoulis, 2010; Kamarudin et al., 2020).

There is a rich literature on the specific characteristics of mentoring process; this information may be utilized in this study. The role of the organization and institutionalization/ establishment of mentoring are important and format the basis of the relation that the mentor has with the organization (Kouyioumtzis, 2018; Sofos & Kassimi, 2017). The content of mentoring depends on the learning theoretical model used, including the roles of the mentors, mentees etc. In a traditional model the role of the mentor is central. This centrality gradually moves towards participation and group work, within which the competences cultivated are beyond the close professional framework, of personal and educational kind. Nowadays, mentoring may be in person, or e-mentoring (Iqbal, 2020), refer to young, old, or mixed groups (Sofos, 2015, Ifanti, 2014). It may take place in an educational environment, or on any other wider that is chosen (Arafa et al, 2016).

The content of mentoring could be an assimilative to the ethos and culture of the leading organization or educational one to new learning objectives. Mentoring may use suitable for every case methodological frames such as the "dialogue", the "strategies", the "advice", the "competence", the "internship", as these are described in the relevant literature (Abiddin & Aminuddin, 2012; Berliner, 1992; Berkely., 2007; Furlong & Mayard, 1995; Leshem, 2012). Zachary (2000) supported a strategic and student-centered mentoring method. It is worth mentioning that Freeman (1997) gives a lot of support to the "holistic" approach to mentoring. In this sense, mentoring intervention coherently includes all its classic elements: professional development, personal

development, and continuous education; in other words, he refers to the “outputs” of the mentoring process. He considers that mentoring relation is volunteer and confidential, but typical as well since the meetings frame should be set from the beginning; however, it is continuously adjusting to the changing needs through the reflective research and evaluation to be an internal part of the process; other researchers comment that this process could be influenced by circle of learning (Kolb, 1984; Theodorou & Petridou, 2014; Tonna et al., 2017); also, even more important, is the view that mentors can connect the used mentoring techniques in the, so called, “model of applied science” (Deligianni & Mathaioudaki, 2008); such is the applied Biopedagogic theory, which considers learning to be in line to the evolution development of Home Sapiens and the development of every human (Alahiotis & Karatzia-Stavlioti, 2008).

#### *2.4. Models for the Effectiveness in Education and Mentoring*

Several studies in the field refer to the “benefits” of mentoring, which are often related, in an explicit mode and/or an infinitive one, to its results not only for the participants, but for the institutions as well (Zachary, 2000). There are referred i.e., some negative feelings that must be faced and replaced by the positive feelings of self-esteem and self-confidence. The enrichment of knowledge and the development of competences are also considered important benefits of adult learning (Philips & Fragoulis, 2010); this must be realized through motives and risk taking towards the conquer of targets. In such cases the mentors are considered to be benefited and increase self-esteem by watching the success of his mentees (Valasi, 2015; Ehrich, 2013).

The model of 3P by Biggs (1993) is especially mentioned by Kamarudin et al. (2020). This model is characterized by three interrelated stages (3P): the Prestage (P), the Process (P) and the Product (P); these stages are consistent with those of educational effectiveness that this study is aiming to: Inputs-Process-Outputs. From a mentor’s perspective the first stage (inputs) describes the previous knowledge and competences for the promotion of the learning of new knowledge; this may or may not affect the products of the process. The process refers to the way that the mentor’s characteristics are involved in the processes. This process leads to the product of learning through mentoring, including the low and high level of cognitive results for the students of a similar or varied professional, educational, or cultural background (Kamarudin et al., 2020).

The development model (GROW) is affected by the Theory of Internal Game of Galleway (Kamarudin et al., 2020). Within this model it is considered that the mentees must develop their abilities and, gradually get independent, “unlocking” their strengths towards the fulfillment of their goals. This model is useful in cases of problem solving and effective conquering of targets and it may be connected to the dynamic effectiveness model that this study develops.

The DEDEPRO Model (De la Fuente et al., 2016) is structured like that of Biggs and introduces the points in time of design (DEsign), development and application (Development), and product (PROduct) in teaching and learning. These points/stages show more effectively the final performance and the personal satisfaction of the participants, an issue that is of significance to the research design of the present study. A cyclic process supplements the DEDEPRO model according to a model that Sofos & Kassimati (2012) present and reminds us of the learning circle of Kolb. The researchers consider the mentoring process cycling and repetitive because of the reflection and the feedback that mentoring is characterized by. In the center of the circle there are three axes that must be considered stable and refer to mentoring: the professional field, the educational field and the personal- emotional background. This information is utilized in the formation of our methodological model. The implementation of mentoring is affected by the experience, the perceptions, and the views of the mentors. All the participants in mentoring must show readiness in identifying and facing difficulties, problems, or even threads. Their expectations and experiences regarding the mentoring interventions is of special importance (Sofos & Kassimati, 2012).

As far as the results/ outputs of mentoring, the most referred are personal (reflection, self-awareness), occupational and educational development; these are related to the “benefits of mentoring”, as often recognized in the mentoring literature (Koutsoukos & Sipitanou, 2020; Philips & Fragoulis, 2010) and are related to the framework of mentoring effectiveness.

Educational effectiveness (Karatzia-Stavlioti & Lambropoulos, 2006) is referred to the effectiveness of the educational process or establishment and is concerned with the fulfillment of the goals set (outputs/results), using the necessary inputs (human resources, economic resources, institutions and organizations/structures, as well as the relevant policy at all levels). The basic educational effectiveness model may be adjusted to mentoring through the specification of every one of the three stages. In the bibliography it is written that every stage is in a dynamic interaction with the others (Greemers & Kyriakides, 2010); such a model is considered a most appropriate in the investigation of the effectiveness of a mentoring project and the betterment of the quality of the relevant educational process.

The above framework is adjusted and formatted as the basis for the present study which investigates the views of adult educators on the effectiveness of mentoring in their field. It utilizes semi structure interviews with adult educators, which it analyses with content analysis searching for responses to the research questions set. The adjusted model is shown in the diagram below; the relevant research findings are utilized in the semi-structure interview questionnaire, so that information is drawn on the parameters of the model, interrelations are identified through content analysis, and concepts and ideas are extracted from this holistic produced model. These are included in the findings of this qualitative study, which enrich the field of effective mentoring and provide a framework for future work in the general field of mentoring.

### **3. The Research Questions and their Correspondence to Research Design**

The main research question of this study is the investigation of the views of a representative sample of adult educators on the effectiveness of the use of mentoring in their educational work; through the qualitative methodology of content analysis (Krippendorff, 2004), it examines the content of the interviewee responses to questions of the semi structured interviews; these questions are in line to the supplementary questions presented below.

#### *3.1. Research Questions*

The supplementary research questions are seeking the views of the adult educators included in the sample on the following:

1. Which is the effectiveness of mentoring in reference to the individual characteristics, the roles of mentors and students-mentees and the relevant mentoring relationship (inputs)?
2. Which is the effectiveness of mentoring in the professional development of the participant adults in relation to the expected benefits (process and outcomes)?
3. Which is the effectiveness of mentoring in the personal development of the participant adults in relation to the expected benefits (process and outcomes)?
4. Which is the effectiveness of mentoring in the educational development of the participant adults in relation to the expected outcomes (process and outcomes)?
5. Which are the problems and difficulties that mentors face during the mentoring application process and which proposals they make to the betterment of mentoring?

#### *3.2. The Research Model*

Based on the theoretical and empirical review, a dynamic, and reflective model was developed, appropriate for the present research. The most issues related to the model have already been reported. In Diagram 2.2.1., the most important factors are presented, which were utilized in the production of the semi-structure questionnaire for the needs of the interviews that were conducted in this study. The participants were asked to talk on the effectiveness of mentoring and express their views on the various factors' effectiveness, through their experience and the relevant knowledge they had acquired; these could refer to inputs, process, or outputs of the effectiveness model.

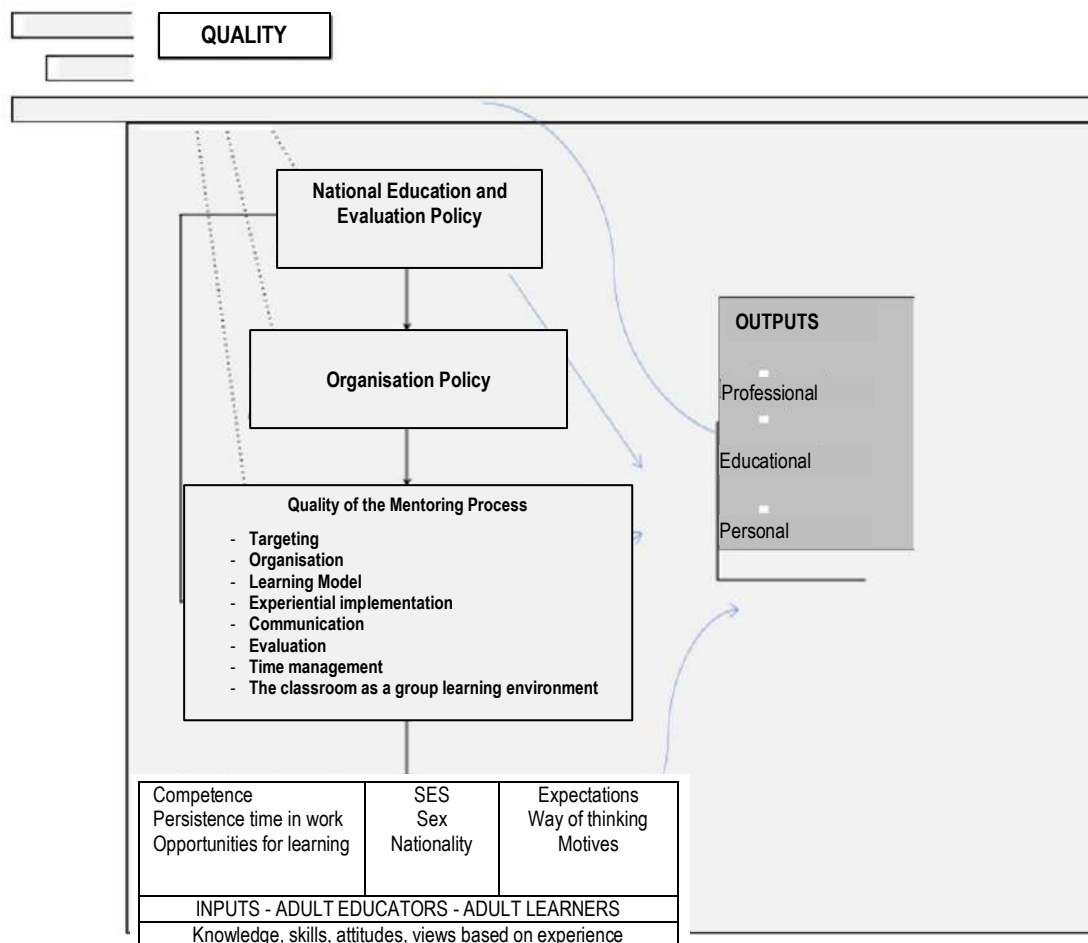


Diagram 2.2.1.: Model on the Effectiveness of Mentoring

More specifically the diagram shows:

- *Inputs* that are the preconditions all the necessary for the materialization of mentoring, such as:

The student-mentee, with his/her individual/personal characteristics, studies and experience, as well as the aims related to mentoring.

The educator-mentor with his/her individual/personal characteristics, the relevant studies as well as professional and educational experience (as these are set out by the educational and general policy of the organization/institution/establishment).

The educational institution responsible for mentoring, its culture, administration, and management as well as its experience; an important part is the human and non-human resources of the institution and their management.

- *Mentoring (educational) process* which refers to the creation and effective application of the mentoring relation and more particularly, the degree of:

Aiming at the application of roles (mentors' and mentees').

The effective interaction and communication among the participants, and

The utilization of a holistic, spherical, and experiential approach to mentoring, through an interactive learning process, appropriate to the professional, educational, and personal goals of the mentees. In the case of a mentoring process, this stage is continuously related to the other two stages, and especially, to the outputs one as this is always involved and inspired towards effectiveness.

- *Outputs* that refer to the results and impact of mentoring. That is, the acquisition of knowledge, skills, attitudes, and behaviors relevant to the needs of the mentees on professional, educational and personal development levels.

#### 4. Method

A proper methodology is significantly important in the process of choosing and adjusting the techniques of collecting and analyzing a proper amount of data, so that the research questions set might be effectively answered; and the researcher must be continuously active and adjusting (Lagoumitzis et al., 2015). A qualitative research methodology is chosen as a most appropriate for the current study; this is because during the continuous careful observation of the interviewee, his/her views on effective mentoring in adult education may be investigated more deeply (Kahlke, 2014). It is supported (Cohran-Smith et al., 2011) that as qualitative research is evolving in time, the researchers try to find a balance between the strong need for methodological flexibility, and a correct methodological structure. A qualitative approach allows the researchers to think of new ways and examine ideas and issues met, so that the needs of the research are satisfied spherically and holistically (Atieno, 2009; Holloway & Todress, 2003).

Some researchers support that the (alternative) use of a quantitative methodology would provide data to answer the specific research questions (Creswell, 2016). As far as the application of a mixed methodology is concerned, this usually demands a combination of data from various sources (Bentahar and Cameron, 2015), while in the present study the data sought are from one source (mentors- with interviews), a situation for which the qualitative methodology is more appropriate.

The study (and investigation) of the adult education mentors' views on the strategies and the impact of effective mentoring is compatible with the holistic and dynamic view for adult education (Greemers & Kyriakides, 2010- Johnson, 2014); this is described as a perfect and spherical individual motivation in order to succeed the maximum result in all aspects. The above are describes diagrammatically in Diagram 2.2.1.

Qualitative methodology is generally considered better when the views of the participants are examined or their experiences relative to the problem set (Newby, 2019; Percy et al., 2015). It allows the collection of a rich and to a satisfactory depth material through reflection and a cyclic way of the learning process (Kolb, 1984).

In the sections below the methodological tool of semi-structured interviews is presented, then issues regarding the role of the researcher are commented upon, the interview guide is presented, and the sampling process is described. Then the data collection and the research process are commented upon together with the validity and reliability and the restrictions of the study.

##### *4.1. Methodological Tool*

The methodological tool used in this study is interview; an important means towards the collection of data as it is characterized by the continuous communication and interaction between the researcher and the participant, providing them with the necessary flexibility and directness in all stages (Paraskevopoulou-Kolia, 2008). Semi-structured interview (Cohen et al., 2008) was chosen as it is consistent to the goal of the present study, allowing deepening and adjustment, and change in the row of asking the questions, so that something is shown, either a connection or an idea, which were not included in the initial plan, but they are considered interesting and necessary for deepening the research. Semi-structured interview is a flexible and dynamic mean, which demands for a strict planning process and allows for open ended questions (Krippendorf, 2004; Creswell, 2016).

##### *4.2. Application of Mentoring and the Role of the Mentor*

As it is written (Cohen et al., 2008; Newby, 2019) the possible subjectivity of the method may create problems. The researcher should not lead or influence directly or indirectly the interviewee by projecting his/her ideas and views. Other issues that problematize the application of an interview refer to the place and time that it takes place, as well as the finding of the appropriate sample. Most important for the success of the interviews are the language and communicative skills of the researcher as well as of the interviewee.

The use of a tape-recorder needs to be faced (Newby, 2019), as, quite often, the mentees show a hesitation towards this, especially when the content of the interview is related to their professional level, a situation within which their role might be doubted. In case that they refuse to be recorded, the researcher must take notes of what he/she hears or sees very quickly (something especially difficult), so that a valid interview is noted.

During the interview the researcher must continuously observe the interviewee and take notes on the way he/she speaks, reacts, and moves (Newby, 2019); in this way, the data will be interpreted with more validity. The researcher must, therefore, be effectively prepared through studying the relevant literature, but, also, through the realization of a few pilot interviews.

#### *4.3. Interview protocol/guide*

In the frame of the proposed research, a guide for the interviews was designed to assist with the semi-structured interviews. The guide is based on the goal of the research and the supplementary research questions as well as on the relevant literature. It contains axes which are connected to the research questions with the enriched main and clarifying questions. The research model is dynamic, interactive with feedback; issues that are expected to be present in the content in all stages of the interviews.

For example, the view that the role of a mentor is supportive (as an input), may be connected to the anthropocentric idea in the process, which can be expressed in the three sectors of the expected results (professional, personal, educational). The last effects strengthen the initial views on the inputs in a dynamic and reflective way. In the interviews it is expected to be recognized references to the three stages of effectiveness at the same time and dynamically. The questions were grouped according to the research question and the main issue they targeted (inputs, process, outputs/results). When it was not easy to separate the elements present (i.e. which of the professional belong to the process and which to the outputs/results), the questions were expressed at a more general level and an effort is made to separate the answers during the interviews.

As already stated, the axons of the interview guide are connected to the supplementary research questions. In Axon 1 the initial inputs are searched, which are used in the development and organization of effective mentoring (Hargreaves & Fullan, 2000; Athanasoula-Reppa, 2017). In Axon 2 the professional expectations are searched for and the roles and responsibilities of the mentees for which the mentor is responsible at all stages of the mentoring process ((Sofos & Kassimi, 2017). Within the Axon 3, elements of ethical support to the mentees, as well as cases of friendly relations development, situations of well-being and ways of encouragement.

Axon 4 content needs a methodological design with the precondition of the knowledge of the ways of investigating the educational needs of the mentees. The interviewees must refer to strategies to face the educational needs, the ways of assessing the degree of the knowledge, skill, attitude and behavior acquisition and the degree of mentoring effectiveness in this field.

Axon 5 seeks to find whether mentoring relation is developed through an educational institution, with an effective policy and useful means of professional, personal, and educational kind. The interview factors could be the experience conversations, observation, guidance, and trust development. Any problems or difficulties identified are expected to refer to the above and the aim of the interview is to have them specified in a framework of suggestions towards corrective interventions.

#### *4.4. Population and Sampling Procedure*

The population of the study belongs to the adults that are teaching in adult education courses, in the existing institutions of Greece; these are Institutes of Lifelong Education in Universities, Other Institutes of Lifelong Education, Second Chance Secondary Schools. The precondition for the inclusion of a subject in the sample was to have at least a basic knowledge on effective mentoring (i.e. has attended courses on mentoring). Other criteria are: a) to be typically able to practice adult education, b) to have a representativeness as it refers to the discipline

(profession), the experience in adult education, age, and gender, c) to have at least 5 years experience in education, d) to be over the age of 28, and e) to work in different varied areas.

The sample was selected by purposive sampling and by snowballing, so that the criterion of representativeness is kept. In qualitative research the sample's size is chosen by the researcher so as to ensure data saturation, a situation that does not necessarily mean a big sample (Krippendorff, 2004); the aim is also to interpret a phenomenon (Creswell, 2016). So, the researcher should focus on choosing the useful for the research individuals (Fusch and Ness, 2015).

#### *4.5. Data Collection*

The major goal of the researchers was to investigate what mentors consider as an effectiveness of all stages of mentoring. Deep interviews would allow to understand the views of the mentors and compare the aims, the practice, and their visions. The interview texts were transcribed accompanied with notes on how the participants responded and the interruptions during the interviews. Then, content analysis was then utilized towards the findings of specific words, themes, or concepts, which would contribute to meanings and connections related to the goal and the supplementary research questions of the study. Content analysis would not be intrusive and should be based on the systematic study of the texts, through which titles and codes were given to the data aiming to highlighting passages with interest and meaning.

During the application of content analysis, it must be clear which data is analyzed and how it is clarified, and which population are collected from and the relevant framework (Krippendorff, 2004). Content analysis, though it has limitations during application, it provides the opportunity to quantify findings to make the analysis clearer (i.e. the frequencies of appearance of certain categories, etc). In the present analysis typical quantification was not used, as it was more interested in the purpose and implications of using the data which contributes to the strong parallels between qualitative content analysis and thematic analysis.

### **5. Research Process**

The research process followed was a proper one for this type of study, that is: a) an invitation was went through e-mail to candidates, in which they have to express their interest to participate in the study, b) a telephone communication with the candidates that covered the aforementioned criteria and gave a positive response for their participation, c) the place and the way that the interview would take place was arranged.

Two pilot interviews were carried out for validity reason. The interviews took place face to face at a specific place where there recording was possible. One interview was made through phone; during this interview notes were taken and every possible effort was made record it with detail. The interviews were carried out from January 2022 until March 2022.

After the stage of transcribing the interviews in written text, a first reading of the collected material with the aim to obtain a general view of what is being said, what they do, and what do the participants mean; also, an effort is made to seek for themes and connections-patterns that are of interest to the research. In this way, coding emerged that gave to every text unit the coding that expressed that most interesting to the study meaning. In the case that certain text units could be interpreted different and connected to different parameters of the model, they were given different code names. All the codes were grouped to repeated relevant ideas.

Based on the meaning and the content of the data, the thematic units that could be formatted from the combination of ideas and the way codes were repeated, was searched for. These units were holistic descriptions and interpretations of the content of the text passages. Then, it was necessary to reexamine the themes based on the criterion of meaning connection among them with a conceptual demarcation and clear separation of the topics necessary for the research. The themes were grouped in more general categories, themes and ideas/concepts, in an effort to construct tree-type diagrams, based on the research model and the relevant research questions.



The last stage concerned the processing of the topics in an understandable and interesting way, with parallel references to the reliability and validity of their content, as well as the research axons. The final goal of the content analysis was to connect the thematic units to the bibliography of the field, so that a deeper and approach to the goal of the research would be realized in a valid and reliable way.

### *5.1. Validity and Reliability of the Research*

The utility and reliability of a research are considered necessary for it to be useful and usable. These two concepts were the basic guides of the present research, which, as a qualitative one with the potential bias that may characterize it, it should: a) meet the criterion of validity, i.e. have a research tool (interview) that investigates and "evaluates" what it intends to study, and b) meet the criterion of reliability, i.e. its results to be repeated in every case of new research under the same conditions (Krippendorf, 2004).

In the implementation of this research, there was a constant effort so that we (the researchers) were not influenced by any of our prior knowledge and expectations, which could, intentionally or not, have an impact on the conduct of the interview. Our aim was to explore the views of the Participants in Adult Education (PAE) in real conditions and for this we prepared and posed the questions in an appropriate way. It is emphasized that our existing knowledge and experiences contributed to a deeper understanding of the texts that emerged from the interviews. The issue of better understanding of the questions by the participants was addressed by conducting pilot interviews at the beginning of the research, which were duly exploited. An effort was made to make the questions clear, simple, and immediately understandable, to respond to the information collected (Cohen, Manion & Morisson, 2008). During the interviews, and when this was deemed necessary, we used clarifying questions.

We recognized that reliability in qualitative research (Krippendorf, 2004) is initially examined through the careful and stable attitude and behavior of the researcher in relation to the design and interpretation of the data, so that they are fully understandable and confirmable. An important contributing factor to the reliability of this research was our deep and continuous study of the topic of mentoring at a theoretical and empirical level.

We were also concerned, on a permanent basis, with the generalizability of the research results, a situation that led us to the clearer and more interesting and understandable presentation of the results. Of course, this does not mean that the results would be fully generalizable, and we always had in mind how important the role of the researcher was to enhance the validity and reliability and the usefulness of the research.

### *5.2. Restrictions of the research*

The experience of conducting the present research highlighted any limitations that any future similar research should consider to optimize its implementation. The purposive snowball sampling method we employed worked with difficulty. That is, finding people to participate-representatively in the survey from three cities (Athens, Larissa, Patras) could not be carried out, so that the final number of participants is 18, as we originally planned. Therefore, we ended up collecting data by interviewing 15 people.

Some of the participants appeared hesitant, at least, initially, rather "afraid" of not being exposed to the people who suggested them, and for this we asked facilitating questions (Krippendorf, 2004), which were most often effective in creating a climate of trust. It is reported that there were times when, while we planned the interviews to last around 30 minutes, they ended up lasting around 20 minutes. Of course, when the few were coherent and targeted, there was no problem. In a few cases the interviewee talked more, getting off topic (at some points), which we dealt with accordingly both during the interview (we politely reminded the topic) and during the analysis. The number of interviews does not allow the generalization of the findings across the country, thus creating the need to expand any future research to include adult educators from other regions.

## **6. Analysis and findings**

### *6.1. Sample demographics*

The sample consists of ten women and five men. Nine of them are in the age group of 40-50 years old and six in the age group of 51-65. Nine of them are Patras's residents (South Greece), three are Larissa's (North Greece) and three are Athens' (capital in the Middle of Greece). Twelve of them hold a PhD, two a MA and one a university degree. Also, six of them have 5-10 years of experience in adult education and nine of them 11-20. This general information on the participants is included in Table 5.1.1., in which the identification abbreviation is also contained (Participant Adult Educator- PAE).

Table 5.1.1.: Identification and demographics of the sample

ID reference	Gender	Age	Town	Level of study	Years of experience	Institutions of work
PAE1	F	48	Patras	PhD (University Teacher)	12	Centers of Training (CoT) - Institutes of Lifelong Learning in Universities (IoULL)
PAE2	M	58	Patras	PhD	20	CoT IoULL
PAE3	F	60	Larissa	PhD (University Teacher)	15	CoT IoULL
PAE4	F	65	Athens	PhD (University Teacher)	20	CoT IoULL
PAE5	F	45	Patras	PhD	16	CoT
PAE6	M	42	Larissa	Bachelor of Arts	4	IoULL
PAE7	F	40	Patras	PhD	7	CoT IoULL
PAE8	F	49	Patras	Master of Arts	6	CoT
PAE9	F	65	Larissa	PhD	20	CoT IoULL
PAE10	F	45	Patras	PhD	9	CoT and Technology
PAE11	M	52	Athens	PhD	12	Second Chance Schools
PAE12	M	49	Patras	PhD	6	Universities
PAE13	F	48	Patras	PhD	5	Private Institutions CoT
PAE14	M	55	Athens	PhD	13	CoT, Universities
PAE15	F	47	Patras	Master of Arts	12	CoT IoULL

## 7. The Interviews' Text Content Analysis

During interviews researchers took notes of any intense reactions of the participants' style or speech for a fuller understanding and deepening of what they "wanted to say"; more specifically, the notes were about any negative expressions, some hesitation or certainty, and apparent agreement with what was said. The above was useful to generate the ideas and words and note the frequency of the word use, as well as the possible differentiation in the meaning when in different framework of use. We first organized the results based on the axes and questions, and then grouped the ideas and themes formed based on our model of effectiveness: Inputs-Process-Outputs and the relationships between them.

In the preliminary questions we sought how they had learned about mentoring, with most stating that they had not received formal training; they had studied on their own and were constantly learning through their experience. We also obtained information on their time of experience and the respective adult education structures they had worked in to check for any differences.

The findings of the content analysis were grouped into categories in relation to the purpose of the research and examples were selected per category based on their degree of representativeness in terms of the theme/meaning expressed. Commonalities were identified, as well as any differences, to gain a deeper understanding of the views expressed.

### 7.1. Axon 1- Views on Mentoring and the Roles in it

Their views on mentoring are presented according to their frequency of occurrence. References are identified in relation to the profession, personality, and education of the trainees (a fact that also shows the importance of these fields) and ideas, which are analyzed in detail in the individual relevant axes.

#### 7.1.1. Mentoring as an Advisory Guidance

The majority of the PAE (Participating Adult Educators) consider it as advisory guidance, in whatever area the trainees seemed to need it; they are of the opinion that it is "...especially important and necessary..." (PAE4), "...in all types and structures of education..." (PAE12). The content is "...on matters of a personal, professional and, above all, educational nature..." (PAE11), "...an element of professional socialization..." (PAE8), and the mentor/trainer "...should satisfy the needs and expectations of the mentee/trainee, and create a dynamic and friendly relationship at a discrete level..." (PAE15), "must be aware that mentoring can motivate...to motivate..." (PAE9).

#### 7.1.2. Mentoring as Advisory Support.

There are several explicit and implicit references to mentoring as a form of advisory support, so that it meets the needs of the trainees, going beyond guidance: "...the role of the mentor/trainer should be more consultative; listen to the conditions, the needs of the mentees/trainees and help them to discover the solution as a consultant and be supportive..." (PAE1). There are some who refer largely to people-centered support of learners and "interpersonal communication..." (PAE2), that "...mentoring is the building of the human mentoring relationship between two parties..." (PAE9).

Doctorates working in universities and/or in teacher trainings, consider that "our role is to empower the person, to encourage them...to see something in the light of the tunnel without the cognitive and other barriers..." (PAE5). A participant who taught in a second chance elementary school comments that support should have limits and more specifically: "Of course we avoid being completely supportive because that way also builds a relationship of dependence"(PAE11).

All participants considered mentoring as a key to professional support and development, which is more developed in the respective Axons. It is noted that the focus of the reports of interviewees is: "...consultative guidance and support on how they will develop..." (PAE11), "...(mentoring) can influence further professional choices..." (PAE8). For VET students, mentoring workers report "It could affect them until they get into the profession...positively..." (PAE11). The reference to the importance of mentoring in today's labor market is important: "...in the field of entrepreneurship...they advise start-ups, this I consider mentoring, and they advise them in their first steps" (PAE7).

#### 7.1.3. Mentoring as a Form of Self-development.

Almost all participants refer to mentoring as a way of self-awareness and self-development that helps to realize the relevant individual goals in terms of their skills and personality traits. For example: "...they will discover some

abilities they didn't know they had..." (PAE11), "I see learning as a transformation of personality, perceptions, meanings, so in this sense a transformation of the person's personality occurs through mentoring, therefore it develops as a whole" (PAE1). Also: "Mentoring should be able to excite..." (SS9), "be focused on the learner's abilities and skills and his wants and deepest desires...(and) self-actualization..." (SS5), so that: "The transfer of knowledge and culture...to proceed efficiently and effectively..." (PAE14). Summarizing the above, it is emphasized that mentoring "should have certain quality indicators..." (PAE2).

## 7.2. Axon I- Views on the Role of the Mentor in the Mentoring Relation and Process

### 7.2.1. Mentor as a Supporter and an Animator

The idea and willingness to help and inspire the mentees/trainees, marks the main characteristic of the role of the mentor, which also requires similar skills. "(His role is) guiding, supporting and encouraging..." (PAE14), "An effective mentor must have social skills...that have to do with people...his role is encouraging..." (PAE3), "The mentor must...encourage the other to take initiatives...be a good listener...(with) empathy..." (PAE8) and "listen to the needs of the mentors/trainees..." (PAE1), "...be an inspiration...as a role model...a guide ..." (PAE5). It is emphasized by one that "(mentoring) is not that widespread maybe because of its complex nature...(PAE15).

### 7.2.2. Views on the Role of the Mentor's Training and Experience.

The training and experience of the mentors is important for most of them, also linked to the structure in which the adult education takes place. "(Mentoring) although it is useful ... we give it little importance ... it would improve things and the culture of educational institutions/structures" (PAE8). It is recognized by most that they have not received formal training in mentoring "(to) combine a personal development goal, either with studies or with experience..." (PAE5). Most of them stress that "(they should) have the maturity to understand and adapt their teaching" (PAE10). Representative is also the next except "Many times (mentees/students) have their insecurities because the years of their formal education have passed. They want a boost in their self-confidence...uh...you're like a guide...like they're the orchestra and you're the conductor..." (PAE6).

### 7.2.3. Views on the Knowledge of Mentoring by the Trainers

When and if it is used, mentoring is informal and experiential. "Not theoretically, they know it practically..." (PAE2), "I don't think adult educators/trainers know the mentoring process... just basic elements of communication with the adults... not everyone applies it, either because there is no time or because they don't really care to support someone...uh, not everyone understands the process..." (PAE3). As it is admitted: "The method of application ... depends on the mood of the mentor..." (PAE5). It is also commented that "when educators are civil servants...most do not enter such a consultation process" (PAE11).

## 7.3. Views on the Role of the Mentee in Mentoring

### 7.3.3. Characteristics of Mentees/Trainees/students.

They consider that the mentee/trainee should accept the role of "mentor as his trainer..." (PAE4). They seem to be aware of the problems that exist in adult education courses, as the mentors/trainees "...have crystallized their personality, their experience, their thinking and their perspective...a mentor (must) be open and listen to the situation of the other... » (PAE7).

The learner's role is summarized by them as "...honest, communicative and participatory..." (PAE4), "...to be receptive and committed...throughout the relationship. To be open...in a two-way process..." (PAE3). "In any case the learner should express what he feels is needed" (PAE8). "...both (must) participate equally...it is a participatory process..." (PAE15).

#### 7.3.4. Knowledge of Mentoring by Mentees/trainees/students.

An ignorance of the mentees/trainees about the mentoring process was also mentioned by all the participants, which they believed reinforces the difficulty of benefiting from mentoring "*...there should be a willingness to cooperate well ...to create a relationship of trust...*" (PAE1). Of course, there was the specificity of age "*The good thing about adults is that because they decide for themselves - they may even not participate...but this has to do with the adult mentee/instructor....*" (PAE6). The participants say that mentees sense the mentoring process but it is clear that "*they haven't learned much, and (most times) they had not engaged in it*" (PAE15).

#### 7.4. Opinions on How to Implement Mentoring- Organization- Structures- Remuneration

##### 7.4.3. Space and way of implementation- increased pay

According to many participants, an important element towards the effective implementation of mentoring is the way it is implemented in the classroom, during lesson; in this case the methodology adopted is of major importance, as it has to support the mentoring relationship (e.g. as a group- experiential, or as a role play). The excerpts below are representative of the participants' views: "*The trainer/educator must be aware of the basic teaching/learning techniques, such as experiential and synergic learning...*" (PAE4). Training the mentors is on mentoring considered important "*...Beyond intuition...(the mentor) has to know all contemporary teaching tools of teaching and how he/she can implement them effectively*" (PAE1). "*The individual mentor's personality is special importance especially in making the lesson more pleasant and interactive...*" (PAE6).

Out of the classroom, e.g. during breaks, meeting and getting to know one another can be promoted; this is "*...The first issue is to allow people communicate...*" (PAE4). "*In practice they learn the mentoring process through meetings, communicating, and cooperation's...*" (PAE16). Special attention is given to the fact that there must be formally given time for the mentoring relationship to be build, and therefore "*...Time and extra effort must be devoted...*" (PAE5). "*Special meetings and discussions must be organized at the administrative level...*" (PAE11).

##### 7.4.4. Views on the Increase in Pay

This question was set autonomously, as it has been commented upon in bibliography and it is often mentioned as a factor towards effectiveness. Almost all participants disagree to the need of more pay, either directly saying "No", or indirectly. However, some consider that more pay might be a motive to a number of mentors. Representative text excerpts are: "*No, I don't believe that mentoring should have a higher pay...like in other types of education, extra money will not make it more effective...*" (PAE1). "*In education generally, there is a need for more reward...I think that this might become a motive, but not a necessity to working in mentoring.*" (PAE8).

## 8. Axon 2: Professional Development and Mentoring

### 8.1. Utilization of Mentoring by the Mentees in their Working Place

The first question in this Axon referred to how the mentees think that they develop professionally through mentoring. The answers referred to this topic in a holistic way, such as "*...we start from the interests of the learners. The...knowledge and experience will help...must be essential...supportive...*" (PAE10). "*They are supported in their professional everyday life; their insecurity is reduced... they make use of their qualifications...*" (PAE8). "*...it helps them to get self-awareness...thinking about their gaps...and a complete picture of them as a subject of the profession...*" (PAE2), "*...to become informed about things in their profession they don't know*" (PAE13).

The mentees/trainees may apply mentoring techniques in their professional field: "*They can also support people next to them...social skills in all professions are needed...uh...and especially in professions that have to do with people, other citizens...*" (PAE3). "*They develop proper professional relationships...*" (PAE4). Also, the mentor:

"...can convince them...to change their professional decisions, to a certain extent, when this is needed..." (PAE15). Especially for the students in the second chance schools "The mentees would be assisted to find out how they could make use of the qualifications they will acquire..." (PAE11).

## 8.2. Changes in the Professional Behavior

Changes are expected due, mainly, to the application of "new knowledge, methods and practices..." (PAE1) more effectively, a situation that "...helps in relations with colleagues..." (PAE4), especially "the acquisition of new communication skills, support or improvement of human values...they are very basic..." (PAE3), "they deal with the other professionally with greater maturity..." (PAE5). At the same time, "Their personal image of what exactly their work is or their relationship with colleagues will have improved...and their skills have increased..." (PAE8), "To be rational...to discover possibilities that they didn't know that they had them..." (PAE11), "They get knowledge...skills...they develop behaviors..." (PAE10), "To improve the quality of the services provided on the job..." (PAE6) and "To greatly increase the self-confidence of the trainees...and they have personal satisfaction" (PAE5).

## 8.3. Development of Professional Skills and Competences

### 8.3.1. Future Professional Skills

Regarding the specialized professional skills for the trainees, communication is considered first by the participants, followed by cooperation, and the combination of the two improves their professional targeting, empathy and efficiency: (Skills) "...of communication, of setting goals, of efficiency them and of the management of their emotions" (PAE8), "...adopts principles of dialogue, communication, consistency and responsibility..." (PAE15). The mentor will help the mentee/trainee "to have a more complete picture of his profession, to be inspired...to adopt...appropriate practical professional skills..."(PAE6). They acquire (the student mentees/trainees) "some skills they didn't have...for an effective interview...to enter the professional arena...and/or the family business..." (PAE5), "...become more receptive to diversity...more mature people...." (PAE9).

### 8.3.2. Future Professional Choices

All participants consider that mentoring will influence their future professional choices, which are often related to personal and educational ones. The unemployed will be helped to "reach the profession, to do something more (in studies) ..." (PAE11). Also, "(...mentoring) opens perspectives and removes fear." "It affects further professional prospects, (clarifying) the professions' landscape..." (PAE8). At the same time, "...it makes them think about profession in a new way...which, of course, it can be influenced by the social environment...it can to see something on the internet..." (PAE6), "(they learn) various techniques of educational, personal and professional development..." (PAE5).

### 8.3.3. Other Professional Benefits of Mentoring

In the interviews other more specific benefits were mentioned, which may be the ones due to the "transformation of the personality..." (PAE1), as "...the benefits in relation to communication and in relation to the person are holistically important..." (PAE3) and "... (there is) consolidation of a culture of interaction..." (PAE8). In the end: "through guidance (becomes able) to educate himself throughout his life" (PAE4).

In an explicit or implicit way, references are made to the holistic approach of mentoring: "increasing self-confidence, curiosity to wonder if I can do something else..." (PAE2), "...the trainee is motivated by a desire to do more things, to look for them...and to win professionally..." (PAE). In the interviews other more specific benefits were mentioned which may be due to the "transformation of the personality..." (SS1), as "...the benefits in relation

to communication and in relation to the person are holistically important..." (SS3) and "... (there is) consolidation of a culture of interaction..." (SS8). In the end: "through guidance to educate himself throughout his life" (SS4). In an explicit or implicit way, references are made to the holistic approach of mentoring: "increasing self-confidence, curiosity to wonder if I can do something else..." (SS2), "...the trainee is motivated by a desire to do more things, to look for them...and to win professionally..." (SS9). In the interviews other more specific benefits were mentioned which may be due to the "transformation of the personality..." (SS1), as "...the benefits in relation to communication and in relation to the person are holistically important..." (SS3) and "... (there is) consolidation of a culture of interaction..." (SS8). In the end: "through guidance to educate himself throughout his life" (SS4). In an explicit or implicit way, references are made to the holistic approach of mentoring: "increasing self-confidence, curiosity to wonder if I can do something else..." (SS2), "...the trainee is motivated by a desire to do more things, to look for them...and to win professionally..." (SS9).9).

## 9. Axon 3- Personal Development

The answers to the questions belonging to the 3rd axon section were often also related to the participants' general views on mentoring (Axon 1). Below, some points are presented to offer a holistic idea on the issues mentioned by the responders.

### 9.1. Personal Development of Trainees and Mentoring.

Mentoring "is considered the basis of personal development..." (PAE15), the mentees learn to "...cooperate (and) work in a team..." (PAE), "...they are given the opportunity to work on themselves, their opinions and their attitudes ..." (PAE8), "They understand the subtlety of emotions...they acquire empathy..." (PAE3). In particular, the students in the second chance schools point out that mentoring "Strengthens their self-confidence a lot to continue the educational process, because there is a high school leakage at this level..." (PAE11), and, in general, the students "...acquire a better balance within themselves, to be able to recognize their real skills... to enter new paths..." (PAE1).

### 9.2. Changes in their Personal Development

Changes in personal skills, feelings, attitudes, and behaviors are reported to make them "... more receptive... to change..." (PAE4). More specifically, "...techniques and skills...can be used in interpersonal relationships..." (PAE1), "They learn to have patience and... persistence comes..." (PAE11), "Their personal image will have improved...their effectiveness ...emotionally and at a personal level of skills..." (PAE8).

There is often the idea that all the elements of mentoring "work psychotherapeutically...uh...everything...collaboration...gets into a group...feels accepted, something builds...forms...cultivates..." (PAE6) and "...his behavior and his setting in general, in society they also have a social impact..." (PAE2), "self-awareness has as an indirect consequence the change of behavior both towards their relatives and towards society...they develop themselves...and they can (become) mentors themselves..." (PAE9).

Central points of the reports (which have a direct interface with the previous sub-sections), concern the skills related to "communication", "collaboration", "goal setting", "management of emotions": "Their communication skill increases, they have communication benefits. Their teamwork is greatly strengthened...they learn to cooperate..." (PAE11), "(gain) self-awareness, develop themselves...receptive to diversity..." (PAE9), "(learn) to function effectively within a group...to understand the roles...respect the other..." (PAE1), "learn to express their feelings, manage conflicts...be more flexible (and have) ...soft skills..." (PAE15).

### 9.2.1. Further Options on Personal Development

The general view is that mentees/trainees, after mentoring, can make "...better choices..." (PAE11) or "correct choices, ...and become more receptive and cooperative..." (PAE4). Usually, "...in these schools are people who didn't have opportunities, financially very difficult, homes without support..." (PAE6). The choices will lead them to improve themselves, to become "better", through the increase of "the circle of contacts..." (SS4), due to "...functioning (the learner) effectively in the context of a group...the role also improves of..." (PAE1) and "can have personal, emotional and behavioral as well as human benefits..." (PAE3). "Generally, on a personal level they get ideas...see...with the eyes of another...more open..." (SS8), "(for) conflict resolution..." (PAE11). Overall: "...they will make better family choices...they will improve, as well as in their workplace and social environment..." (PAE9) and "(they will escape) ...from some stereotypes and some older ideas..." (PAE15).

## 10. Axon 4- Views on Mentees' Educational Development and Mentoring

Almost all participants mention that they understand that "...learning is a continuous process...they apply lifelong learning tactics..." (PAE4). More specifically, "they update knowledge and skills, communicative and personal... they learn, they are informed about new methods (and practices) ..." (PAE1) and "...they learn to solve some issues...to be interested, to take on challenges..." (PAE11). It all boils down to: "There will be a change in their learning behavior..." (PAE8), they will "...be confident..." (SS3), "...they will progress academically..." (SS6), "They enter new paths...(for) scientific association, to go to a conference..." (PAE5)

### 10.1. Development of Educational-learning Skills

As already commented in the introductory section (Axon 1), the mentees learn the skills of cooperation and those of deep learning: "...seeking learning, mutual support for learning, skills of group cooperative learning, discovery...creativity, critical thinking..." (PAE4). "... (those that are teachers learn) to impart not only knowledge, but also skills and cross-curricular skills...to promote, that is, holistically their students..." (PAE1), "...acquire skills) to take initiatives..." (PAE11). Also, they get familiar to "...goal setting, planning and implementation..." (SS8) "...for noble competition, trust...ethics...empathy...productivity..." (PAE12), "If (mentoring) has been done correctly, then...the mentee/trainee has acquired thinking skills...to improve, to respond more to new needs..." (PAE6) and, "Metacognitively...to learn how to learn..." (PAE5), "Their worldview about learning changes..." (PAE15).

### 10.2. Influence on Further Educational Choices

Basic is the view that through continuous and group learning, the improvement of individuals is enhanced: "they acquire skills, work on their attitudes..." (PAE8). The educators of special education "...get help for what they will do next..." (PAE11) and, in general? "New paths open up, to do something else, to acquire a specialization (do a master's degree) ...as ...their personality is transformed...their worldview changes...or they change their work to their studies..." (PAE1), since "they are transformed... they convey human values..." (PAE12).

In addition, it is important that the mentor improves because now (there are) "criteria and indicators...the educators can judge and compare to produce new knowledge...become an instructor themselves for those around him by his example..." (PAE2). Especially for special education "the teacher will introduce new methods in his teaching, will be informed (about) cooperative teaching...to become better in educational matters... (to be motivated) to do a master's degree, a doctorate..." (9). Of course, it is emphasized: "A good mentor always updates his own learning process..." (PAE12).

## 11. Axon 5- Effectiveness of Mentoring Implementation and Legitimation



The answers in this section are related to and supplement the findings of the rest sections; They are more specific and give the interviewees one more opportunity to express more details on the effectiveness of mentoring issues. Most participants stress that mentoring is not “*established, institutionalized/legitimized.*” (PAE3); it is “*not formally implemented and at an experiential level*” (PAE11), a situation that makes it “*inefficient*” (PAE11). Also “*Effectiveness and the way it is implemented are up the individual concerned, that is the mentor himself*” (PAE1). There is a view that “*... mentoring is a complementary process ... based on the mentor’s freedom...*” (PAE2), and also that “*there must be a precondition for the acquisition of advisory guidance for e.g. special university teachers*” (PAE5); in this way “*a moral satisfaction is realized, which can not have any reward.*” (PAE 15).

### 11.1. Problems and Mentoring Implementation Difficulties

The non-institutionalization of mentoring is the most important difficulty, which is encountered many times both in the text of the interview itself, and in a large number of them: “*it should be done according to specifications... to be composed... to define material, to be institutionalized/established some body, which will put the fixed...guide axons...*” (PAE6), “*...as a scientific addition, I believe it would become more qualitative...*” (PAE5). At the same time, the importance of the mentor's self-education is also noted “*...instructors are also trainees...to refer to literature, to materials that will help them...to transform...*” (PAE2), “*...(important is) experience and experiential (of mentoring) as well as having an evaluation*” (PAE13).

Regarding the mentor himself, other difficulties are mentioned, such as “*insufficient experience, knowledge, his personality is not suitable...for trusting relationships...*” (PAE1). More specifically, “*education interest is missing...from the State...*” (AE9), “*there is no scientific training (of mentors).*” In terms of trainees' difficulties, it is mentioned that they are not “*receptive, think they know everything or don't want to change their value system...they don't improve themselves...*” (PAE4).

Difficult are often considered the “*general conditions for the application of mentoring...whether the organization/structure knows about it and has the intention to implement it, to provide all the facilities*” (PAE2) “*...I don't think we have given much importance to mentoring in Greece, so that it is included in the plans of the state...probably it has been sidelined or rather they have neglected it, considering it not so important*” (PAE9).

Also, difficulties are reported regarding time duration of mentoring: “*Also, time is often non-enough...*” (PAE3), “*There is usually limited time...*” (PAE4). It is emphasized by many that “*the biggest obstacles are related in individuals’ time. Neither the mentor/trainer, nor the mentee/trainee... have time to develop this relationship...*” (PAE). It is noted that there is always an important element (which requires time), that is “*...the necessity to evaluate and improve the mentoring process both from the state and from the structure/organization, so that it becomes a 'scientific' process...*” (PAE5).

### 11.2. Proposal for the improvement of mentoring effectiveness

Several elements that are part of this theme are diffused throughout the interview in an explicit or implicit way. At this point, the researchers sought to elicit more specialized information that distilled the participants’ approach to mentoring relationship and its effectiveness. Emphasized e.g. is the view against the “*establishing and institutionalizing the school/education of the market*”, stating: “*Adult education structures should become more human-centered... (the trainer must) ...see the learner on a human-centered level...there should be empathy...*” (PAE11). Due to the particular (practical) requirements of mentoring, one PAE emphasized that “*A mentor should train some stable groups of trainees so that he/she would be able monitor their progress...*” (PAE15).

Also, the importance of targeting training and evaluation in the field of adult education is highlighted: “*...targeting, continuous training and evaluation. In other words, this needs to be a continuous process...as formative...*” (PAE1), “*...specialized training is needed for mentoring...for every mentor, newcomer to work. This is how time and experience are gained towards efficiency...and... there should be specific training programs for mentors...*”

(PAE3). "*People who can be mentors for others should be selected...*" (PAE9). The mentor must "*...be completely open in philosophy, in mentality, be eclectic....*" (PAE12).

Regarding the issues of space and time, which are often highlighted as "problems" for the proper implementation of mentoring, it is stated that if this is institutionalized "*these can be regulated, as it means I already control, measure, evaluate and am evaluated*" (PAE1). It is believed that remote mentoring, as it was implemented during the pandemic period, contributed to overcoming most difficulties. One PAE emphasized that "*Distance mentoring is more intense, trainees are more outgoing...*" (PAE5).

## 12. Discussion of the Results

In this part of the paper, the results of the research are related to the theoretical part and the review of the literature, so that the results might be drawn and written down; also, proposals for the future will be made. This synthesis of the results is organized according to the research question (or axon) they are related to.

The opinions expressed at the beginning of the interviews about what they consider mentoring to be and what qualities they attribute to the mentoring relationship, are central to the entire topic of the paper; basically, everything starts from and is connected to the very concept of mentoring. Most of the PAE consider mentoring as "counseling guidance", with the rest, tending to characterize it as "consulting support". The basis of both references is that mentors help and guide mentees through their own knowledge and experiences Valassi (2015) also agrees with this point of view, as well as Kamarudin et al (2021) and Klinge (2015) who have a similar view.

The PAE present their relationship with the trainees as one of trust and friendship, in which communication is constantly developed, and appropriate behaviors emerge that, initially, contribute, as tools, to their professional development. As early as the 1980s, Bova & Philips (1984) report that trainees/mentees learn from their mentors to survive, take risks, set high goals and communicate in any professional context, even in matters concerning the formation of salary as well as the pace and manner of professional success (Allen et al., 2006; Balikci et al., 2017). The PAE comment in a special way on the mentoring of teachers in relation to their professional development, considering that through a revised and effective framework (with modern methodologies) they are prepared to become mentor-educators in their workplace, something that is also emphasized by researchers (Krishnamurthy, 2019; Lofthouse, 2019; Lofthouse et al, 2020).

Most participants comment that mentoring is also a form of self-awareness and self-development that contributes, as a healthy mentoring relationship, to the realization of individual goals at all levels. Mentors should, they argue, excite and, in a quality supportive way, contribute to the cultivation of the trainees' skills and the realization of their deepest desires - their self-actualization. Mentoring is considered, as in the relevant literature, an important tool of guidance, (Giannakopoulou, 2008; Moisdou, 2018), support and encouragement (Nauridis, 2005), but also mediation/facilitation towards the achievement of the learning and development goals of the mentees/trainees (Achistein & Athnases, 2006; Kokkos, 2005; 2012; Karalis & Papageorgiou, 2012; Bagakis & Tsigou, 2017).

The above characterizes, according to the PAE, the complex role that the mentor is called upon to adopt, in order to adapt to the needs and special of the mentees/trainees (Giannakopoulou, 2008; Jarvis, 2006). At the same time, the necessity of the existence of appropriate social skills by the mentor is emphasized, in order to contribute to the autonomy of the groups with which he works (Kapsalis & Papastamatis; 2002). This needs to be done regardless of the learner's socio-cultural level; the friendly mentoring relationship allows the mentor to take on the role of a 'critical friend', which Allen (2007) empirically demonstrated in the case of a school principal mentoring program, which he related to the effectiveness of the administration; similar are the findings of Anastasiou et al (2015), but also Simkins et al., (2006) for Great Britain. Complementary are the research findings that recognize the effectiveness of scaffolding as well as trust in cultural interpersonal communication in the mentoring relationship (Hammond & Gibbons, 2005; Hobson and Sharp, 2005; Kamarudin et al., 2020; Mercer & Fisher, 1993; Robins, 2006 Van de Pol & Elbers, 2013).

When PAE had more years of experience and had also worked with teachers, they tended to emphasize the effectiveness of building an appropriate learning culture in the mentoring relationship. Something similar is supported by Nearing et al. (2020), who highlighted the production of benefits for both science and society (Pfund et al., 2013).

It was also commented on that having a human-centered approach on the part of the mentors/trainers (Robins, 1999; Rogers, 1999) is important, given the aim of feedback, encouragement, and inspiration of the mentees/trainees. In this context, the mentor must be like a role model, with flexibility, knowledge, and experience to give feedback, advise and help the trainee at all levels effectively, after having studied and "listened" to their needs. A particular role is played by the mentor's complete knowledge of the mentoring content, the subject, and the mentoring process. These are particularly emphasized by researchers as well (Giannakopoulou, 2008; Valassi, 2015; Vlachou and Manesi, 2019), who also describe the need to realize the goals set in a two-way way, so that the mentors/trainers also learn from the process, to improve their skills, to acquire new experiences and new knowledge and methodologies (Kamarudin et al., 2020).

PAE consider that, in addition to a positive attitude, openness, empathy and communication, appropriate knowledge on a theoretical, but also on a practical level - methodology (teamwork, experiential, problem solving)- is required. Researchers have studied effective behaviors in the implementation of mentoring programs, even in mentors (Brace et al, 2018; Garvey & Westlander, 2012), especially, in the context of differentiated teaching and understanding the role of interculturality towards an effective mentoring (House et al, 2018).

In a more specific tone, the PAE, state that they study about mentoring, and, also, learn through their experience; this happens, especially, when they apply creative and experiential learning, as these, are similarly emphasized by scholars (Allan, 2007; Bozionelos, 2004; Chappell, 2007; Koutsoukos et al., 2021; Robins, 2006). Descriptions of PAE focus on the effectiveness of team-collaborative methodologies, which is also recognized by Renshaw (2008) and Simkins et al (2006); also, the acquisition of new experiences and skills, which Phillips and Fragoulis (2010) specialized as those of problem solving, communication, collaboration, and reflection in the mentoring relationship as well as in the optimization of their knowledge, attitudes, and skills. Special mention on the effectiveness of problem-solving method appears in the works of Hobson and Sharp (2005), Hafford-Letchfield et al. (2007) and Robins (2006); in their works they address the positive contribution to addressing the goals, hopes and fears of the mentees/trainees.

Also, the need to apply a diverse type of mentoring (mosaic), which is adapted to the needs of the trainees and facilitates specialized professional learning, is often mentioned, as by Calligan, 2018. The participants believe that mentoring for teachers and school principals will make them more effective, since, as Pryce and Kelly (2018) emphasize, this is the way that educational practice is transformed and, through dynamic interpersonal dialogue, the well-being of the participants is promoted (Allen & Eby, 2003; Dawson, 2014; Mears, 2019).

In general, the interviewees highlighted the need for the development of an appropriate and research-informed preparation and training method for mentors; as this is pointed out by the research (Aspfors and Fransson, 2015; Vergidis, 2006; Kontakos & Govaris, 2006), mainly, this concerns the culture of the organization and the complex role of education today, in the era of the 4<sup>th</sup> (cultural) revolution (Lampropoulos et al., 2021; Papageorgiou, 2008); particular importance is given to the contemporary qualitative educational change and innovation (Vozaitis & Yfanti, 2008; Hargreaves, 1994; Hendricks et al., 2010; Karatzia-Stavlioti and Lambropoulos, 2006). In addition to being informed by research findings, the creation of a sustainable structure of scientific and educational content for mentors is also proposed (traditional and digital/electronic) (Chival et al., 2010; Pfund et al. al., 2015; Spencer et al., 2018). It is emphasized that the final success of the mentoring relationship depends on external factors as well (e.g. other environmental inputs); such could be the characteristics of all those involved as well at the implementation, and evaluation framework (Valassi, 2015).

The initial views of the PAE regarding the role and the willingness of the mentees/trainees for their interaction, honesty, participation, and commitment in the mentoring process (Kapur, 2015; Robinson, 2001; Rogers, 1999; Simkins et al, 2006; Vandeburg & Stephens, 2010; Xanthopoulos, 2019). In addition, participants believe that

mentors must be interested in and willing to evaluate and be evaluated and even accept mentees'/trainees' fruitful criticism (Heinz, 20003; Lee, 2003).

As it concerns time and place of mentoring implementation, in the first general part of the interviews, elements directly related to the mentoring relationship and the roles of those involved were mentioned. There are frequent descriptions that the mentee/trainee should be engaged in the process, making the first contact, keeping in constant contact through phone calls, e-mails and in person. Follow his/her own performance and acquiring new skills (Furlong & Mayard, 1995; Kamarudin et al, 2020).

Since mentoring is based on teamwork and collaboration, participants highlight the importance of the effectiveness of the role and the organizational context of the professional organization that provides it, as it is shown by McVann et al., (2010). The PAEs consider important that the mentor uses modern teaching tools, which make the course interactive and enjoyable not only in the classroom, but also outside it (for contact with real situations); not only in person, but also online; with the use of various teaching tools there must be enough time at to organize the mentoring process. Almost all PAEs report that the time is not enough, as the hours outside the classroom contain other obligations of the instructor. Related research shows that mentoring gives a positively influential role to organizational results (Fogarty et al., 2017; Powel, 2012).

The need for additional remuneration (salary) for the implementation of mentoring is viewed negatively by all PAEs; they only think positively on it for the cases where this would expect additional employment. They justify their opinion as regards to the effectiveness of mentoring in adult education programs, noting that "some relationships are not rewarded with money" (Fogarty et al, 2017; Valassi, 2015).

The relationship of mentoring with professional development has already been pointed out at the beginning of the interviews. In this section, more specialized information is sought about the professional benefits of the mentoring relationship for all those involved in it, regarding the process and the outputs. PAE's report focus on the professional and not only development of both mentees/trainees and mentors (Kamarudin et al., 2020; Zachary, 2006). Some have expressed the view that even in times of crisis, such as the Covid Pandemic, mentoring can help professionally, even if offered online (Powel, 2012). It is noted in the review of research by Kupersmidt et al., (2017) on several mentoring programs that there is a greater proficiency and readiness in the case of online programs.

The participants express opinions in favor of the effectiveness of applying mentoring for different professional groups, agreeing, in general terms, with the relevant research findings; for example, for psychologists and teachers (mainly of Science), where the research showed the necessity of exploiting emotional intelligence and of knowledge about effective teaching methodologies (Melton et al., 2019; Miller et al., 2019; Whiteside and Lies, 2004; Whiteside, 2019). Especially for young academics it was found out that opportunities, extra time, and appropriate space should be provided (Kayombo, 2020). In the case of medical academics, a long-term effectiveness framework of training and mentoring programs was created (Sheri et al, 2019). This is also mentioned as an effective solution by the PAEs, which can also be applied to other adult groups (Athanasidou et al., 2015; Karatzia-Stavlioti, 2005).

It is considered by the participants that it is useful to provide mentoring in the professional field of the trainees, to develop correct professional relationships and attitudes as well as to organize their professional development; situations that are also recognized in the relevant literature, often associated with positive effects on a personal level as well (Dowly, 2019; Oberholzer, 2019; Sofos, 2015). Based on the above, mentoring is expected to lead to the acquisition of new professional skills (new ways of communication, cooperation, targeting, empathy, and emotion management), but also to the promotion of human values, the improvement of their personal image and the development of a network of partnerships (networking). Some opinions comment on the interconnection of mentoring with the increase of entrepreneurship and the creation of new start-up businesses (Lambropoulos, et al., 2022).

The interviewees consider that mentoring influences the future professional choices of the trainees, which are related to both personal and educational ones. Especially for teachers in school units, the optimization of the mentoring relationship and its benefits emerge through the creation of mentors in schools and the promotion of collaboration and reflective practice (Cambell & Haines, 2018; Mynott, 2018) all this, without the mentors' constant criticism of trainees' teaching ability, as documented by Ingleby (2014).

The opinions of the participants on the contribution of mentoring on the personal level of the trainees, were usually connected with the professional and the educational ones. In this section, participants mainly refer to the positive impact of mentoring on their personal development, through the opportunity to work on themselves, their attitudes, and behaviors. The application of mentoring should lead to the redefinition and specialization of the general rules of the organization/institution, the improvement of interpersonal relationships, self-awareness and the upgrading of social status; Pollack (2012) also agrees to the above, regardless of the type of approaches (eg developmental, learning, social), as well as Domonguez and Hager, (2013). The need to develop special personal skills is also mentioned, linked to aspects of communication, cooperation, goal setting and management of emotions as well as the formation of the respective roles. The SS focus on the issue of self-awareness as a basis for the development of the self and the acceptance and understanding of diversity (Alahiotis & Karatzia-Stavlioti, 2021).

The participants consider that mentoring contributes to the expansion of further personal choices for the trainees, in terms of increasing their circle of contacts, especially for economically vulnerable groups such as the students in special education. They also promote the improvement of their personal role, through the acquisition of human benefits and the resolution of problems and conflicts - at a social, professional, and family level (Brace et al., 2018; Bova & Phillips, 1984).

The views of the interviewees on the educational benefits of the mentees are also linked to both the process and the outputs. The inclusion of appropriate effective activities in all learning groups and particularly teacher-led situations is considered essential by all participants, which has been researched for seasonal employees, managers, gifted people and executives/leaders (Heinz, 2003; Walker, 2011); special references exist for the preparation of first-time teachers through the reframing of the school process (Beutel et al., 2017; Willis et al., 2019). Research has also extended to mentors in educational organizations to highlight relational interactions towards an effective framework (Andrea, 2010; Bush, 2007; Chao et al., 1992; Ensher & Murphy, 2011; Ingersoll & Strong, 2011; Mathews, 2015 · McInerney & Green-Thompson, 2017; Waterman & He, 2011).

The most positive effect on educational development is related to the understanding and adoption of the concept of lifelong and continuing education through which, they change and update their knowledge and skills on new topics, and new professional methods (Allan, 2007; Simkins et al, 2006). The PAEs consider that the new educational paths also lead to scientific specialization in higher structures than the one they had attended. This treatment of lifelong learning is becoming more and more demanding in the digital society we live in and is constantly highlighted in studies of the modern market (Karatzia-Stavlioti & Lambropoulos, 2006; Lambropoulos et al., 2021). As the PAEs emphasize that through such a framework of continuous, lifelong learning, they are expected to develop metacognitive skills in conjunction with communication for teamwork and "soft" /interdisciplinary skills. These contribute to the transformation of the trainee's personality and worldview, so that he can improve and respond effectively to the new needs that emerge (Alahiotis & Karatzia-Stavlioti, 2021).

In all the interviews there are references to the expected educational changes and to the mentors as individuals who should study and improve, producing new knowledge and promoting new experiential and collaborative methodologies. Also, they may seek greater effectiveness in mentoring through reflection and openness, mainly through continuing their studies and advancing their careers (Dowley, 2019; Mynott, 2018; Oberholtzer, 2019).

In the section on research question 5 the PAEs often repeat elements that they had already touched on in their previous answers but try to position themselves in terms of how to deal with difficulties. An important problem pointed out by most was that when mentoring is implemented, it is done informally, optional, and not mandatory; also, it is done empirically, with its effectiveness depending on the mentor him/herself, since it is not a very formal

and organized process (Manolopoulou (2011). This situation can inhibit the relationship of those involved, but also their overall development (Phillips & Fragoulis, 2010). The above is exacerbated by the general lack of time required to meet everyone's expectations and cope with excessive workload (DeCesare et al., 2016).

The important issue of the adequate training to mentoring instructors is highlighted, so that they acquire a deep understanding of the principles of adult education and of the informal cultural dimensions of the organization involved (Aspfors and Fransson, 2015; Vergidis, 2006; Hobson et al., 2009; Theodorou & Petridou, 2014; Kontakos & Govaris, 2006). Some participants saw the potential lack of trust and/or reluctance on the part of the mentees/trainees, as a problem, which is reinforced when they perceive their mentor/instructor as a supervisor, critic and/or evaluator. In any case, the development of a mutual mentoring relationship of interaction, trust and support is constantly suggested by the literature (Theodorou & Petridou, 2014); it is complemented by the general acceptance of the use of formative assessment for mentoring improvement, something suggested by the research on the design of effective mentoring programs (Valassi, 2015; Chival et al., 2010; Pfund et al., 2015; Spencer et al., 2018).

The proposals of the participants on the above problems are mainly focused on the establishment/institutionalization of mentoring, considering that in this way its application will be improved; more specifically, the general effectiveness of mentoring is expected to improve: 1) if its use is mandatory in the structures adult education, 2) if adult education training programs are drawn up in issues of mentoring planning and implementation, 3) if suitable educational material is created and if mentees/trainees are guided in the use of a variety of sources, traditional and digital, 4) if the mentors follow self-improvement methods, 5) if the self-improvement methods are shown and cultivated for the mentees/trainees as well; in this way an interactive relationship can be created to solve any kind of problems (professional, personal and educational). Related research supports the above (Valassi, 2015; Barrera et al., 2010; Gandhi & Johnson, 2016; Karalis & Papageorgiou, 2012).

### **13. Conclusions**

#### *13.1. General Conclusions of the Study*

The question of the application of mentoring in the field of education, and in adult education, is of increasing concern to both the scientific community and the people who practice educational policy. Many researchers have carried out a variety of both theoretical and empirical studies on mentoring; these point out its importance in education and its positive effects on both mentees/trainees and mentors/trainers. The institution of mentoring is relatively recent for the Greek Education, which justifies the relatively limited relevant Greek literature; additionally, the general issues of educational effectiveness have not been researched enough in Greece. The investigation of the effectiveness of mentoring is given great interest lately, and a small contribution towards this direction is sought by the present work, through the study of the views of adult educators.

Regarding the participants' view of the definition of mentoring, a variety of demarcations appear, as this is also shown in the review of the relevant literature. In almost all the interviews, it was mentioned that in mentoring there is a person with experience in a field, who aims to guide the inexperienced, towards the enrichment of their theoretical and empirical knowledge and the development and cultivation of the skills required for their professional, personal, and educational development. It is considered that the mentor/trainer has the important role of providing experiential based learning to the mentee/trainee based on his needs.

The mentoring relationship, to be effective, should contribute to the holistic development of all involved. The openness to discussion, the feedback exchange of positions and information, the experiential and group approach to knowledge and skills, but also the positive emotional involvement of everyone are essential characteristics of an effective mentoring, both based on the literature and according to the views of the interviewees. In the interviews, the particularities of the characteristics of both the trainees and the instructors were often mentioned, a situation that highlighted, on the one hand, the changing reactions of the trainees and, on the other hand, the different perceptions of the instructors regarding their mentoring role.

The views of the PAE's on the mentoring role differ depending on the educational context, the concepts such as guide, supporter, advisor, animator, and the role model dominated. It is worth mentioning that the PAE's, as mentors, adjust their views on their role according to the needs of their mentees/trainees, such as e.g. those who work in Second Chance (Secondary) Schools differ in their views on the support their mentees/trainees (who consider that they wish to earn a Secondary School diploma) in relation to the mentors/members of the universities (who consider that they prepare their mentees firstly for their scientific/theoretical knowledge education and secondly for their effective introduction to the labor market). The educational programs, teaching methodologies and learning approaches applied by mentors are the basis for the formation of a demanding and multifactorial role. Mentors/trainers have special knowledge, skills, and experiences, in order to understand deeply and effectively the principles of adult education, especially in today's complex era of digital information and rapid scientific development.

The effective implementation of the mentoring process can bring about a variety of results and benefits on a professional, personal, and educational level. The dominant problem, however, in its effective implementation is that of its non-institutionalization and organization as an establishment. Everyone's suggestion is to make mentoring an official and mandatory process through its institutionalization, but also through the constant institutional support of mentors at a theoretical and practical level.

### *13.2. Proposals for the future*

Regarding the participants' view on the definition of mentoring, a variety of demarcations appear, as this is also the fact in the review of the relevant literature. In almost all the interviews, it was mentioned that in mentoring there is a person with experience in a field, who aims to guide the inexperienced, towards the enrichment of their theoretical and empirical knowledge and the development and cultivation of the skills required for their professional development, the personal development and educational development. It is considered that the trainer/mentor has the important role of providing experiential and group-based training and assistance to the mentee/trainee based on his/her needs.

When mentoring relationship becomes effective, it should contribute to the holistic development of all involved. The openness to discussion, the feedback exchange of positions and information, the experiential and group approach to knowledge and skills, but also the positive emotional involvement of everyone are essential characteristics of an effective mentoring, both based on the literature and according to the PAE's. In the interviews, the particularities of the characteristics of both the mentees/trainees and the mentors/instructors as well as their importance, were often mentioned, a situation that highlighted, on the one hand, the changing reactions of the mentees/trainees and, on the other hand, the different perceptions of the mentors/instructors regarding their mentoring role.

The effective implementation of the mentoring process can bring about a variety of results and benefits on a professional, personal, and educational level. The dominant problem, however, in its effective implementation is that of its non-institutionalization and formal organization. Everyone's suggestion in this study is to make mentoring an official and mandatory process through its institutionalization, but also to create a system of constant support of mentors at a theoretical and practical level. Similar research of both qualitative and quantitative kind should be of special usefulness in the field of mentoring effectiveness in adult education; it would be expected to contribute to the advancement of adult education locally and in other countries.

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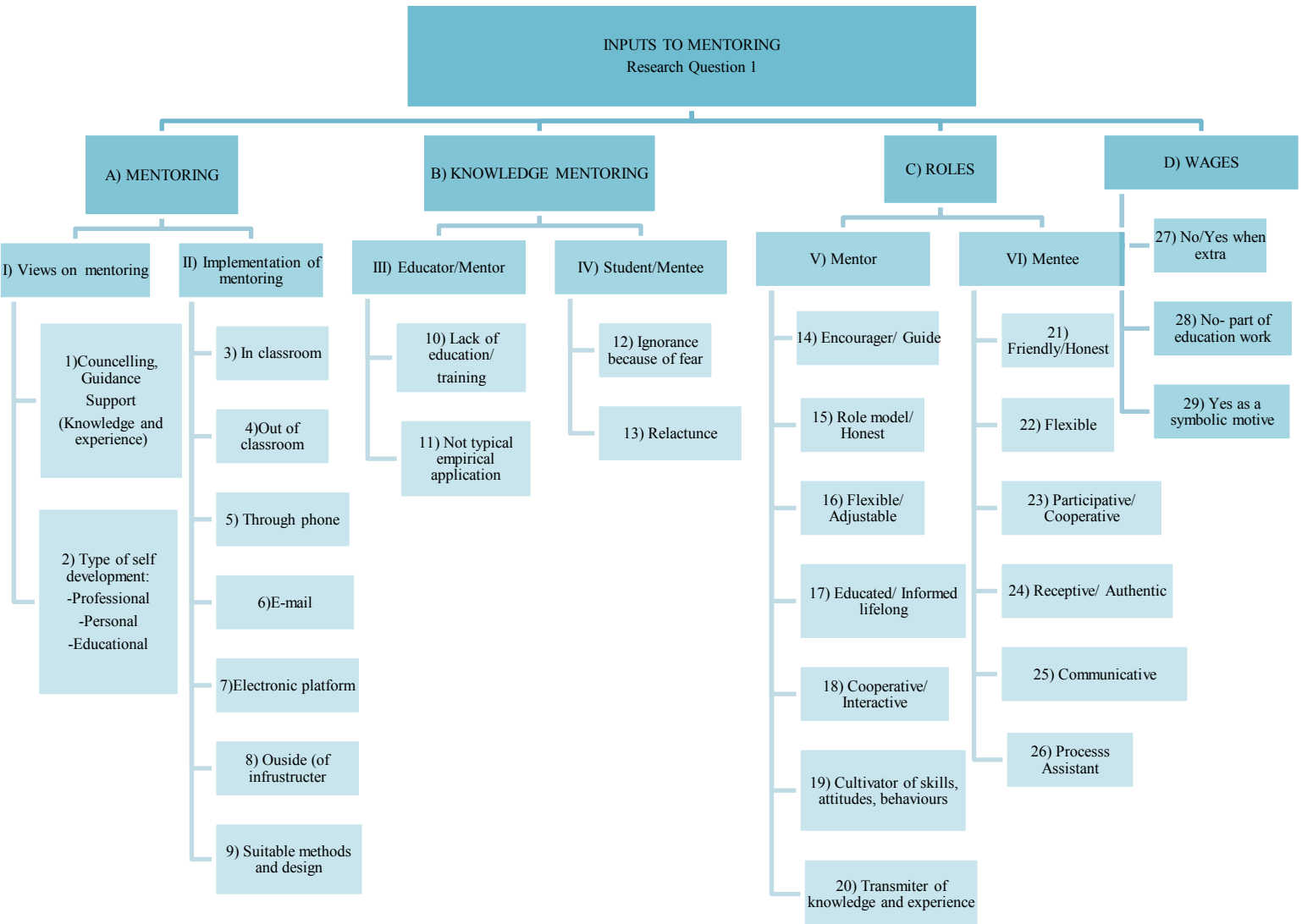
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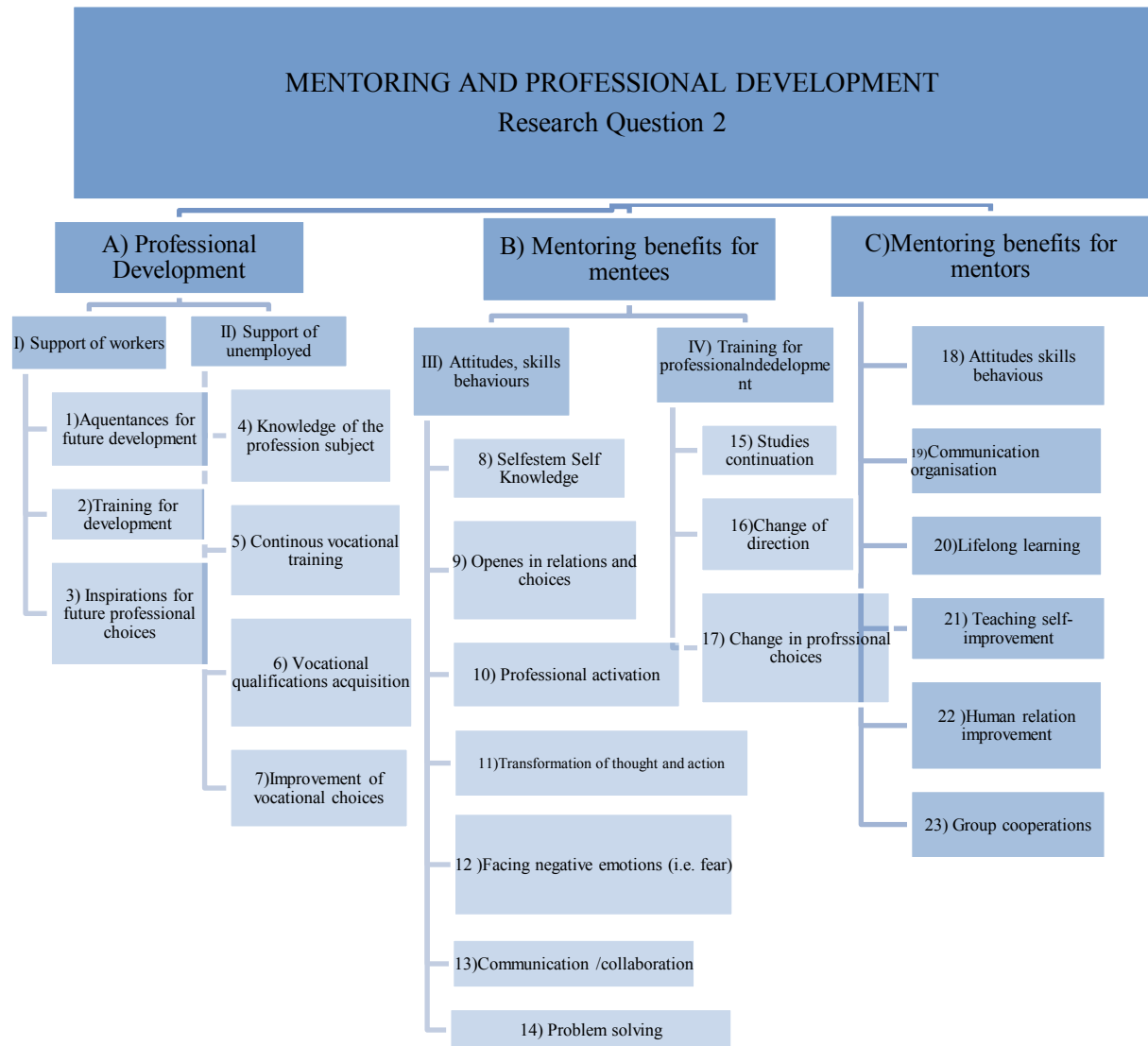
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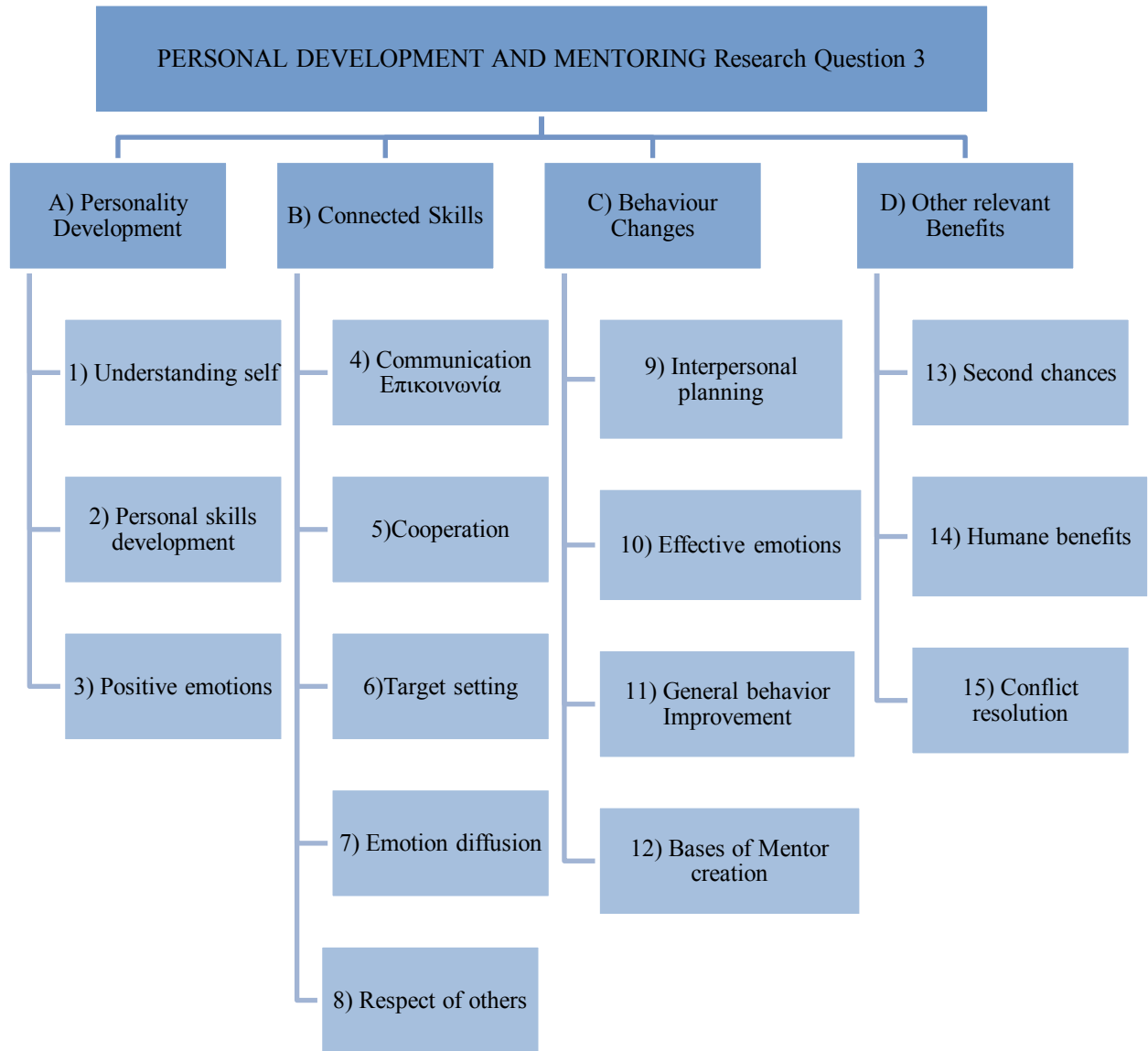
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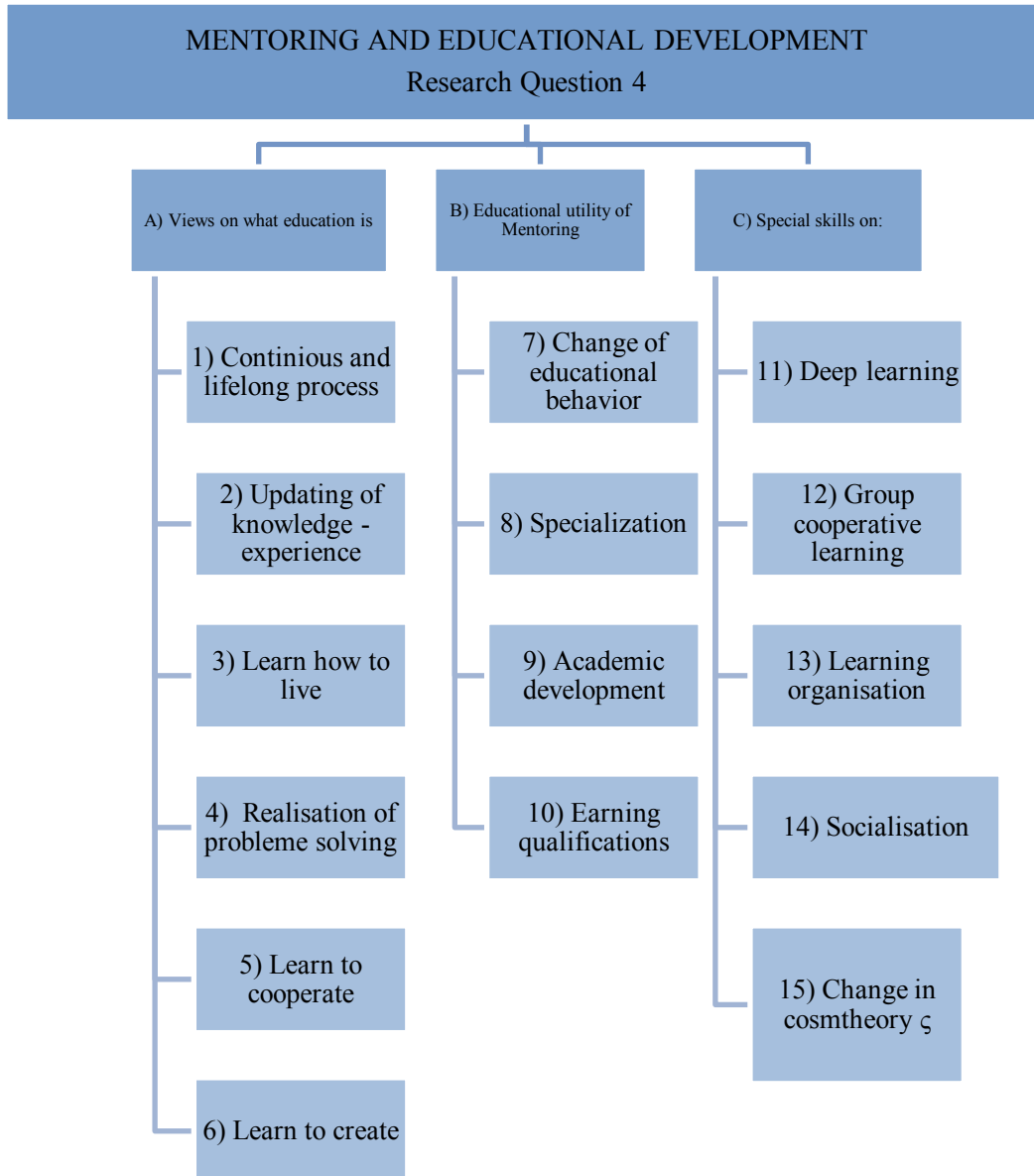
**APPENDIX A**

Representation of the main concepts found in the interviews, which refer to the supplementary questions set





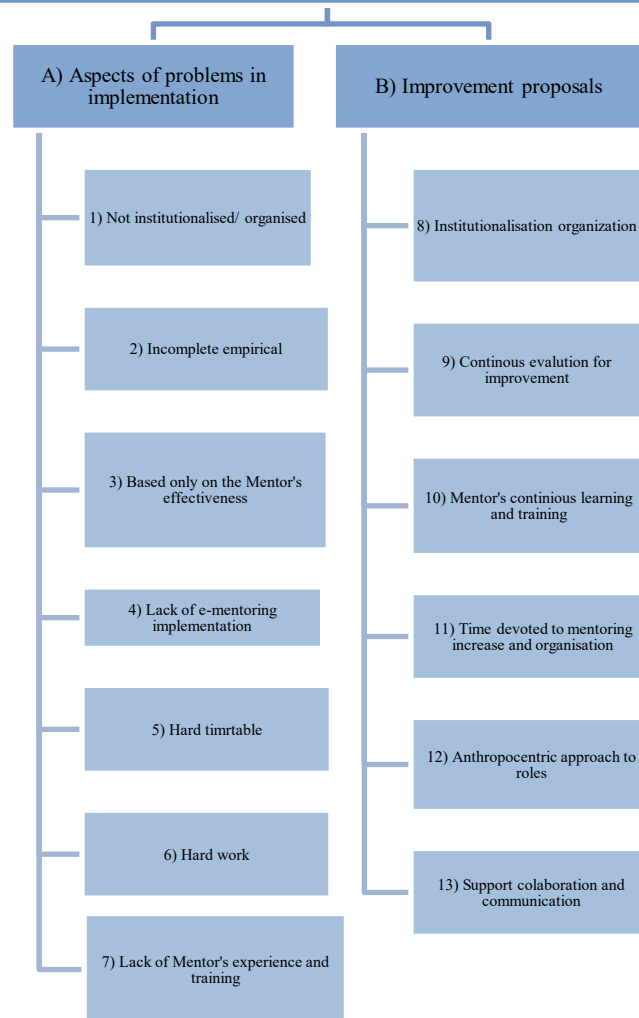






## EFFECTIVENESS AND DIFFICULTIES OF MENTORING IMPLEMENTATION

### Research Question 5



# Exploring Thai EFL Undergrads' Challenges in Constructing and Sequencing Turns to Make Friends

Kornsak Tantiwich<sup>1</sup>, Kemtong Sinwongsuwat<sup>2</sup>

<sup>1</sup> Assistant Professor in the Department of Foreign Languages at the Faculty of Liberal Arts, Prince of Songkla University (PSU), Hat Yai, Thailand

<sup>2</sup> Associate Professor in the Department of Foreign Languages at the Faculty of Liberal Arts, Prince of Songkla University (PSU), Hat Yai, Thailand

Correspondence: Kemtong Sinwongsuwat. Email: ksinwong@gmail.com

## Abstract

To identify challenging areas to be addressed in English conversation lessons, this study examines how Thai EFL learners construct and sequence their turns in making conversation to fulfill the social goal of making friends. Twelve non-English major undergraduates enrolled in a selective English conversation course were engaged in unscripted role-play conversations where they had to introduce their friends and made small talk before parting. Their conversations were recorded, transcribed, and analyzed via the lens of Conversation Analysis (CA). Close analyses of the turn and sequence organization of these conversations revealed the students' challenges in four areas: including (1) completing an opening sequence, (2) introducing others (3) offering relevant information to establish a social relationship, and (4) ending the conversation. An abrupt, unsignalled initiation of a new topic was found in the opening part of the conversation which could disrupt its flow. In the centering part, student mediators failed not only to offer the name of the person introduced to recipients but also to expand their turns to build a rapport and show interest in the conversation partner. Lastly, in the closing part, they ended the conversation swiftly without any pre-closing sequences. These findings shed light on interactional skills these EFL learners need to master in addition to skills in manipulating linguistic resources to improve their conversation abilities and to make the interaction flow more smoothly and effectively.

**Keywords:** Conversation Analysis (CA), EFL Interactional Skills, English Conversation Lessons, Introduction Sequence, Thai EFL Learners

## 1. Introduction

English has been a very important medium for interaction among people across the globe in both formal and informal situations. Many countries have long made English a compulsory course in school curriculum. Thai undergraduates have in particular started taking English lessons since the age of six or seven or in grade 1 (Prathom 1) (Thai Ministry of Education, 2016). They have learned all the four skills of speaking, listening, reading, and writing as well as grammar for over 10 years; nevertheless, the English proficiency of the majority of Thais has not yet ranked at a high level according to various test measures. Waluyo (2019), for instance, reported that the English proficiency level of the majority of university students remains only at A2, considered basic users in the

global scale of the Common European Framework of Reference for Languages (CEFR). This means they are able to understand mainly simple sentences and commonly used expressions and communicate mainly on routine matters. Furthermore, English First English Proficiency Index (EF EPI) in 2022, calculated from test data of over 2-million test takers worldwide who did the EF Standard English Test (EF SET) online, shows that Thailand was in the very low proficiency band (EF EPI scores less than 450). This suggested that these test takers could only introduce themselves in a basic way, give easy directions, and comprehend simple expressions. In addition, Education Testing Service (ETS) (2021) revealed that the average score of Thais taking the TOEFL IBT between January - December 2021 was 83 out of 120, regarded as an intermediate level of proficiency on the TOEFL scoring scale. When compared with other countries, the Thais seemingly struggled most with reading and speaking skills.

Speaking has in fact proven the most challenging productive skill for most Thai EFL learners to master. Suwannatrai et al. (2022) reported that Thai learners did not feel confident when engaged in real-time talk-in-interaction. Their level of anxiety was reportedly rather high when speaking English to both foreigners and classmates (Imsa-ard, 2020). The learners were found to experience difficulties in many areas, including vocabulary, pronunciation, and grammar (Chema et al., 2023). Just as argued in Liu (2011) and Seedhouse (2004), it will be helpful to pinpoint areas in which EFL learners struggle to participate in English conversation. Teachers can then design more successful interventions to help them become more confident and potent communicators, enhancing both their communicative and interactional competence.

While most studies have examined learners' challenges in using linguistic resources in conversation, there has hardly been any research examining how they manipulate interactional resources such as turns and sequences when engaged in such an ordinary social activity as making new friends. Therefore, this study, conducted as a component of a larger study examining the efficacy of a Conversation Analysis (CA)-informed approach to EFL conversation teaching, aimed to examine how Thai EFL learners construct and sequence their turns to accomplish this common social goal. CA, the framework established by Harvey Sacks, Gail Jefferson and Emmanuel Schegloff, was adopted to examine these learners' turn construction and sequential organization of talk and challenges they faced when performing social actions involved in this social activity in the target language. Undeniably one of the most powerful tools to dissect conversation, CA has its main goal of uncovering the interactional order and organization of genuine talk-in-interaction (Liddicoat, 2007; Markee, 2009; Seedhouse, 2005). With this invaluable tool, we can learn how talk participants methodically understand, interpret, and respond to each other in order to achieve their interactional objectives. Additionally, CA provides insights into the way social meaning is constructed through language use in everyday interaction (Goodwin, 1981; Heritage & Clayman, 2010). In language teaching, EFL teachers can genuinely benefit from employing CA to disclose how their students use L2 in real-life interaction (Barraja-Rohan, 2011) and to design English lessons to enhance their conversation skills.

### *1.2 Interactional Practices in Conversation*

The method of Conversation Analysis (CA) allows for the revelation of interactional practices, including turn-taking, sequencing, overall structuring, and repair practices, as described by Wong and Waring (2010). These practices provide a holistic and detailed insight into how language is used and interpreted during communication at a detailed level. Here are the central practices pertinent to the application of CA in this study.

Undoubtedly, one of the most fundamental and crucial components of talk-in-interaction is the turn-taking system (Schegloff, 2007; Wong & Waring, 2010). It involves the creation of turn-constructive units (TCUs) which serve as the building blocks for completing communicative acts through the use of various language resources, including speech sounds, vocabulary, grammar, and melody. These TCUs can be in different forms, such as words, phrases, clauses, sentences, or even audible sounds, as demonstrated in Example (1) at lines 4, 3, 6, and 1, respectively.

Excerpt (1) [CA ASI 2004 data—modified]			
01		→ ((ring))	(an audible sound)
02		(5.0)	
03	Shelley:	→ District attorney's office.	(a phrase)

- 04 Debbie: → Shelley:, (a word)  
 05 Shelley: Debbie,=  
 06 Debbie: → ↑what is the dea::l. (a sentence)  
 07 Shelley: what do you ↑mean.  
 (Couper-Kuhlen & Selting, 2018; Wong & Waring, 2010)

TCUs also possess allocational properties evident in the occurrence of a transition relevance place (TRP) at the end of each TCU that enables the exchange of speaker roles. Thus, the ability to project TRPs is a crucial skill for EFL learners to navigate successfully through natural conversation. In order to have this skill, they require mastery of phonological, grammatical, and pragmatic resources in the target language. For example, they must be capable of identifying the beginning, continuation, or end of a turn based on prosodic cues, including leveling, rising, or falling intonation. Additionally, they must be able to recognize the completion of sentences, clauses, phrases, or words with grammar knowledge. Lastly, they also need to realize actions performed by speakers' utterances such as invitations, offers, or requests.

However, in talk-in-interaction, there might be some situations where it may not be feasible to wait for a TRP to initiate a turn. Thus, it is also vital for learners to acquire and develop skills related to early turn entry as well as next-speaker self-selection, including practices such as (1) overlapping, (2) using turn entry devices, (3) recycling turn beginning, and (4) making a nonverbal start (Wong & Waring, 2010). Seedhouse and Weninger (2019) affirmed that the ability to appropriately use these turn-taking practices can help learners to enhance their interactional competence and promote successful interaction in the target language.

Speakers can particularly use overlap to start their turns early in a conversation. It is very important to be able to overlap at the right time by closely monitoring TRPs through various linguistic cues. For example, a speaker can start their turn just right before the end of the previous speaker's final sound, known as transitional overlap. In Excerpt (2) provided below, Bette starts speaking at the same time as the final sound of the word "taxed" is pronounced in line 02.

- Excerpt (2) [Jefferson, 1983, p.3, as cited in Wong & Waring, 2010]  
 01 Andrea: The first bit of income isn't tax[ed]  
 02 Bette: → [No: that's right,  
 03 mm;

Another example of overlap can be seen in the following excerpt, where Ann starts accepting Bella's invitation by uttering "I would like to." in line 02 as soon as the possibly turn-ending word "times" is produced by Bella in line 01.

- Excerpt (3) [Heritage, 1984, SBL 10:12]  
 01 Bella: Why don't you come and see me some [time.  
 02 Ann: → [I would like to.  
 03 Bella: I would like you to.

Occasionally, speakers may initiate their turn as soon as they perceive the gist of the previous speaker's statements, referred to as "recognitional overlap." As demonstrated in Excerpt (4), Heather promptly commences his turn in line 02 right after he grasps the content of Steven's upcoming remark.

- Excerpt (4) [Jefferson, 1983, p.18—modified, as cited in Wong & Waring, 2010]  
 01 Steven: A very ha[ppy New Ye]ar. (to the-)  
 02 Heather: → [Thank you:] a nd a happy ( ).

In addition to the overlap, speakers can also employ various turn-entry devices or turn-initial items such as "well", "but", "and", "so", "you know", or "yeah" to enter a turn space. These devices not only help minimize the negative impact of an overlap but also soften the abruptness of the overlap, and facilitate the smooth transition to the next turn without impairing the beginning of a new turn (Schegloff, 1987; Wong & Waring, 2010). As exemplified in

Excerpt (5), Ellen applies the turn-entry device "well" to introduce her overlapping turn in line 04, allowing her to become the next speaker after Tamar has completed her turn in line 03.

Excerpt (5) [Wong & Waring, 2010, p41 - Waring seminar data]  
 01 Tamar: so that could be related to the oral tradition how you  
 02 tell a story not just to how you process the  
 03 infor[mation.]  
 04 Ellen: → [Well ] that' why it's narrative structure  
 05 we're talking about discourse knowledge?  
 06 Tamar: Yeah.

Another essential practice employed by the next speaker when initiating a turn in an overlap circumstance is use recycled turn beginning, wherein the words or phrases buried in the overlapped talk are repeated. As illustrated in Excerpt (6), K repeats R's words that were overlapped in line 04 in the turn in line 05.

Excerpt (6) [Schegloff, 1987, p.75]  
 01 R: Well the uhm in fact they must have grown a  
 02 Culture, you know, they must've- I mean how long-  
 03 he's been in the hospital for a few days, right? Take  
 04 a[bout a week to grow a culture]  
 05 K: → [I don't think they grow a ] I don't  
 06 think they grow a culture to do a biopsy.

Apart from overlapping, using turn entry devices, and recycling turn beginning, nonverbal signals such as gaze, facial expressions, head movements, coughing, or throat clearing are also essential devices for making early turn entry in conversation (Schegloff, 1996). It is therefore important for EFL learners to become proficient in using them since they can facilitate smooth and effective early starts in conversation. For instance, Mondada (2007) stated that a pointing gesture towards documents on a table can be used as a self-selection tool for initiating turns in a meeting.

Furthermore, introducing sequencing practices to EFL learners is just as important as making them aware of these turn-taking practices since it will enable them to comprehend the social actions being performed and how to respond appropriately to it. To achieve this, EFL learners should receive training and become proficient in three key related areas: (1) generic sequencing practices, such as adjacency pairs and preference structures; (2) type-specific sequencing practices; and (3) response tokens.

An adjacency pair refers to a sequential pattern of two turns consisting of a first pair-part (FPP) followed by a second pair-part (SPP). For instance, a greeting usually requires a response greeting. As demonstrated in Excerpt (7) provided, the utterances in lines 03 and 04 form an adjacency pair. Hyla's FPP in line 03 sets the expectation for Nancy to produce a specific type of response as SPPT in line 04.

Excerpt (7) [CA ASI 2004 data, as cited in Wong & Waring, 2010]  
 01 ((ring))  
 02 Nancy: H'illo:?  
 03 Hyla: → Hi:  
 04 Nancy: → ↑HI::

Preference organization or preference structure is a type of generic sequencing practice that explains how actions in social interaction are systematically designed to either strengthen or weaken social solidarity. Preferred actions, characterized as natural, normal, or expected, are strategically employed to mitigate face threats, maintain social cohesion, and avoid conflicts (Heritage, 1984). Three criteria are employed to determine what is considered preferred: (1) its regularity of occurrence, (2) its potential for closing a sequence, and (3) its unmarked turn shape (Wong & Waring, 2010). Preferred actions typically align with what is commonly observed or practiced, and are performed straightforwardly and without delay (Heritage, 1984; Schegloff, 2007). In Excerpt (7) provided above,

the responses in lines 02 and 04 are considered preferred as they are usually expected after the FPPs in lines 01 and 03.

Self-identification through offering information in getting acquainted interactions is another example of actions preferred over requests for recipients to identify themselves (Pillet-shore, 2001, 2018) because it aligns with the social norms and expectations of providing relevant personal details when introducing oneself. According to Pillet-Shore (2011), when a know-in-common person immediately initiates introductions, it is considered one of several strategies to demonstrate their adherence to social norms and their orientation towards social expectations. As illustrated in Excerpt (8) below, two women, Astrid and Lilly, showed up in the living room where three men, Joe, Duncan, and Lance, were sitting on a sofa. From lines 1 through 16, they engaged in an opening sequence in which they exchanged repeated greetings and how-are-you ("How's it going"; "What's up").

Excerpt (8) [FG a-1, as cited in Pillet-Shore, 2011]

01	Joe:	↓Hello,
02	Ast:	hehh! huh huh.hh! ↑Hello::,
03		(.)/((Joe lifts drink and bows head to Ast, Lil))
04	Dun:	H[ey,
05	Ast:	[How's it goin[:?'\',
06	Lil:	[↑Hi[llo: :ǝ
07	Ast:	[HE::(h)yǝ = Wh(h)at's (h) up guys, = .hh
08		Hhh! Huh huh hah hah hah
09	Lil:	[Hi:.
10	Ast:	[.hhhh! hhuh h[ah hah .hhh!
11	Dun:	[heh heh Wh[(h)at
12	Lil:	[huh heh heh hih hih
13	Ast:	.hhhh!hho::[hh!
14	Lil:	[What's ↓u:p.
15	Dun:	What's u:[p,
16	Lan:	[What's up,
17	Lil:	→ I'm Lilly,
18		(0.4)
19	Joe:	I' [m Joe ((raises left hand, palm displayed to Lil))
20	Dun:	[I'm Duncan ((raises right hand to Lil))

Following the opening sequence, Lilly made the choice to initiate introductions with the three men in line 17 as a way of respecting a social norm related to the preservation of personal information. Goffman (1971) explained that this social norm requires individuals to demonstrate respect for each other's privacy by avoiding direct requests for personal information. Instead, Lilly could have explicitly requested the recipients' names by asking, "What's your name?", but such a direct inquiry is considered a dispreferred action.

In contrast, dispreferred actions are performed with hesitation, mitigation, or the provision of accounts. In Excerpt (9), prior to delivering a dispreferred response in line 03, signaled by a pause, Graham uses a hesitation token ("tuh-uh"), offers an apology, and provides an account for his refusal in line 4. Through the utterance in line 05, he obviously shows his willingness to accept the invitation under other circumstances, indicating his orientation towards maintaining an ongoing cordial friendship with James.

Excerpt (9) [Liddicoat, 2007, p. 118 - Tools]

01	James:	How about going out for a drink tonight
02	Graham:	→ (0.2)
03		tuh- uh sorry b' d I can' make it=c' z
04		Jill has invited some' ve her friends over.
05		Perhaps some other time

In addition to understanding general sequencing practices such as adjacency pairs and preference structures, it is very crucial for learners to be familiar with type-specific sequencing practices that occur in social interactions,

such as agreement and disagreement, news announcement, complaint, invitation, offer, request, and introduction. To effectively participate in social interactions, learners must become proficient in organizing and navigating these sequences, particularly those that can be complicated and lead to awkward or conflictual situations. For example, before delivering a news announcement, learners should first assess whether the news is worth sharing and proceed through the pre-announcement phase. Additionally, news recipients must know how to respond appropriately, whether with enthusiasm, disapproval, or neutrality (Maynard, 2003; Wong & Waring, 2010).

Another example of general sequencing practices is an introduction sequence. A learner who plays a role as mediator (a known-in-common person) in multi-party encounters should assess if an introduction is appropriate to be launched by applying the pre-introduction utterance such as "Have you two ever met before?". If it is not the first time face-to-face meeting among parties, the development of an introduction will not occur as demonstrated in Excerpt (10) below.

Excerpt (10) [PT.02.TR.03.22.00 (simplified), as cited in Pillet-Shore, 2011]

01	Ted:	→ .hh this ih- Have you= ((Ted points to Roc))
02	Ted:	=m[et?
03	Mar:	[I tell ya,=
04	Ted:	=Roche[lle; ((Ted sustaining point toward Roc))
05	Roc:	[Ye(h)ah hh Hi there hah hahh
06	Lil:	[Yea::h. I ha:ve, I:'ve me::t ['er::
07	Roc:	[.hhh!

In Excerpt (10), Ted, acting as a potential mediator, initiates an introduction between Mary and Rochelle, hinted by his utterance "This ih-" in line 01 just right before he makes the pre-introduction remark "Have you met?". However, this introduction does not proceed as planned, since Mary and Rochelle had already met each other, thereby disrupting the introduction process.

In addition to the generic and type-specific sequences, it is important for learners to be familiar with the use of response tokens for different purposes. These tokens serve various functions, such as acknowledging prior statements, e.g., "mm hm", encouraging continuation, e.g., "mh hm", "yeah", providing assessments, e.g., "great", indicating a desire to move on from a previous speaker's persistence, e.g., "no no no", "alright alright alright", and signaling an intention to speak, e.g., "yeah." Mastery of these response tokens is particularly valuable for enhancing active participation and engagement in conversations.

Learners should also understand the structure of starting and ending a conversation. For instance, when making a phone call, there are typically four sequences that take place, namely, (1) summons-answer; (2) identification-recognition; (3) greeting; and (4) how-are-you patterns. Excerpt (11) provides an example of these patterns.

Excerpt (11) [Schegloff, 1986, p.155 – modified, as cited in Wong & Waring, 2010]

01		((ring))	} summons-answer
02	A:	Hello,	}
03	C:	Hello, Jim?	} identification-recognition
04	A:	Yeah,	}
05	C:	It's Bonnie.	} identification-recognition
06	A:	Hi,	} greeting
07	C:	Hi, how <u>are</u> yuh.	} greeting + first <i>how are you</i>
08	A:	Fine, how're you,	} second <i>how are you</i>
09	C:	Oh, okay I guess.	
10	A:	Oh okay,	
11	C:	Uhm, (0.2) what are you	anchor point
12		<u>doing</u> New Year's Eve.	

Additionally, in everyday conversation, issues such as false starts, mishearings, and misunderstandings frequently occur (Jefferson, 1973; Schegloff, 1987). Therefore, to tackle these issues and maintain a smooth conversation, learners should learn how to manage repairs. Wong and Waring (2010) suggest four types of repairs that learners need to understand: (1) self-initiated self-repair; (2) self-initiated other-repair, (3) other-initiated self-repair, and (4) other-initiated other-repair. Mastering these repair strategies will help learners to handle the difficulties that arise during conversations.

Self-initiated self-repair is a specific way to deal with a problem that arises during a conversation where the speaker identifies and corrects the issue themselves. An example of Shelley's self-initiated self-repair is provided in Excerpt (12). In line 03, Shelley recognizes a potential trouble source in her statement and takes the initiative to address it herself by sharply cutting the word "just" off just before correcting it to continue with her turn.

Excerpt (12) [CA ASI 2004 data — modified, as cited in Wong & Waring, 2010]

01 Shelley: alright well I talked to him earlier and I told  
 02 him I didn't know what the scoop was and  
 03 → now: I don't know.hh if I should jus- if I  
 04 should blow off u:m tha:t stupid trial thing  
 05 or what I mea:n (.) I don't know.

Alternatively, self-initiated other-repair involves the speaker recognizing a problem in another person's speech and taking the initiative to help them correct it as shown in Excerpt (13) below. B faces challenges in recalling a name, as evidenced by the utterance of "W- whatever k-" in line 01, along with the statement "I can't think of his name." However, in line 04, A assists B by providing the name.

Excerpt (13) [Schegloff *et al.*, 1977 – BC:Green:88, as cited in Wong & Waring, 2010]

01 B: He had dis uh Mistuh W- whatever k- I can't  
 02 think of his name, Watts on, the one that  
 03 wrote [that piece,  
 04 A: [Dan watts

Next, other-initiated self-repair refers to a type of problem remedies in conversation where a recipient identifies a difficulty in understanding the speaker's utterance or seeks clarification. The speaker then provides a repair of the misunderstood utterance as shown in Excerpt (14) below. Joy is experiencing difficulty understanding the meaning of Harry's words in lines 01-02. To seek clarification, Joy utters "Wha'¿" in line 03, prompting Harry to provide clarification in line 04. This other-initiated self-repair process also helps maintain smooth and effective communication.

Excerpt (14) [Liddicoat, 2007, p.189 – Lunch]

01 Harry: Aren't you suppose to go up there with John  
 02 though?  
 03 Joy: → Wha'¿  
 04 Harry: Aren't you goin' up there with John.  
 05 Joy: Na:h that fell through weeks ago.

In the final type of repair, called other-initiated other-repair, the recipient of a conversation identifies and fixes a problem in the speaker's talk. In Excerpt (15) below, Roger treats Ken's utterance "the police" in line 01 as problematic in some way, thus replacing it with "the cops!" in line 04, which is then taken into Ken's response in line 05.

Excerpt (15) [Jefferson, 1987, p. 93—modified, as cited in Wong & Waring, 2010]

01 Ken: → Well- if you're gonna race, the police have said this  
 02 to us.  
 03 Roger: That makes it even better. The challenge of running



- 04 → from the cops!  
 05 Ken: → The cops say if you wanna race, uh go out at four  
 06 or five in the morning on the freeway...

## 2. Methodology

### 2.1 Data Collection

Twelve non-English major students from several faculties, including food industrial technology management, management sciences, engineering, science, and liberal arts were randomly chosen as participants. The average English proficiency level of the learners was at A2, measured with General English Language Assessment, an English proficiency test online from <https://www.cambridgeenglish.org/test-your-english/general-english/> before the class began. The test contains 20 multiple-choice questions.

The participants were asked to form four groups of three and perform unscripted role-plays based on the situation prompt as shown in Appendix A. After 10-minute preparation, their unscripted roleplay performances were video-recorded for subsequent close analysis.


### 2.2 Data Analysis

A close CA analysis of the recorded conversations was conducted to (1) explore Thai EFL undergrads' designing and sequencing turns at talk to accomplish such a common social goal as making friends, and (2) unveil challenges they faced when engaged this type of social activity. The recorded conversations were transcribed using the Gail Jeffersonian transcription convention, adopted by Hutchby & Wooffitt (1998) and shown in Appendix 2.

## 3. Results and Discussion

To explore Thai EFL undergrads' designing and sequencing turns at talk to accomplish such a common social goal as making friends and to uncover the challenges they faced when engaging in this specific type of social activity, recorded sample conversations were obtained from four groups of three non-English major students whose English proficiency level was at A2. The transcribed conversations were closely examined through the lens of CA and the students' interactional challenges were identified in four areas including (1) completing an opening sequence, (2) introducing others (3) offering relevant information to build up a social relationship, and (4) ending the conversation. The transcript in Excerpt (16) below revealed how three parts of the conversation; namely, opening (from lines 01-08), central (from lines 09-18), and closing parts (from lines 19-20), were sequentially organized by the students. The conversation in this excerpt happened as student G and student PM, who were best friends, ran into student WM, who was an old friend of student G. After the exchange of greetings, student G introduced student PM to student WM before parting.

Excerpt (16) Making friends – 01			
01	G:	Hello	} Opening part
02	WM:	Hi	
03		(.4)	
04	G:	How are you?	
05		(.2)	
06	WM:	I'm fine.	
07		(.2)	
08		and you?	
09	G:	(.) Ah:: this is new my friend.	} Central part
10	WM:	Ah	
11		(.4)	
12		Ah	
13	PM:	My name is PM.	
14		Nice to meet you.	
15	WM:	nice to meet you too?	
16		My name is WM.	

17	PM:	((noping his head))	
18		(.5)	
19	G:	Bye bye	
20	WM:	Bye bye	

### 3.1. Opening Part

It was found that two groups out of four opened the conversation by only saying “hi” and “hello” to greet each other before jumping into an introduction sequence in the central part of the conversations as shown in lines 01-04 in Excerpt (17) below.

Excerpt (17) Making friends – 02

01	Nab:	→	↑Hi::
02			(.3)
03	Pha:	→	Hi Nabee
04	Nab:	→	↑Oh Hi Nang-Phar,
05	Nab:		This is my (.2) ah friend,
06			she names (.2) Ton,
07			↑Oh Ton? (.2) this (.) she- (.) Umm my friends,
08			She name Nang-Phar.
09	Ton:		Nice to meet you ((raises right hand, palm displayed to Nang-Phar))
10	Pha:		Nice to mee you, Ton. ((raises right hand toTon))

On the other hand, the other two groups additionally applied the how-are-you sequence; however, they failed to offer a relevant turn to complete its return sequence shown in line 8 in Excerpt (16) above. In line 9, student G abruptly shifts to introducing her friend, instead of responding to the preceding first pair part (FPP) of the question-answer adjacency pair in line 08 by saying, e.g., “I am great.”; “Not bad” or “Okay.” Illustrated in line 05 in Excerpt (18), Liddicoat (2007) noted that the question “how are you?” after a greeting sequence is treated as a question about the current state of the participant rather a greeting, thereby being designed to get an answer before moving on to other matters.

Excerpt (18) [Liddicoat, 2007, p. 241 - Tell9:1-4]

01	Will:		H'llo.
02	Val:		Will?
03	Will:		Oh hi. How're things,
04	Val:		Okay n how're you.
05	Will:	→	Okay=
06	Val:		=That's good.

### 3.2. Central Part

In the central part in Excerpt (19) from lines 9-18, student G, as a mediator, engages the interlocutors in an introduction sequence, introducing student PM to student WM. As seen in line 9 in Excerpt (19) below, after the how-are-you sequence, student G initiates the introduction sequence between student PM and student WM by using an opening utterance of “This is ...”.

Excerpt (19) (continued) Making friends - 01

09	G:	→	(.) Ah:: this is new my friend.
10	WM:		Ah
11			(.4)
12			Ah
13	PM:	→	My name is PM.
14			Nice to meet you.
15	WM:		nice to meet you too?
16			My name is WM.
17	PM:		((noping his head))
18			(.5)

The fact that student G does not offer student PM's name to student WM in line 9 brings about the problem student WM is experiencing in turn construction indicated by the fillers and the micropause from lines 10-12 in Excerpt (19) above. This also prompts student PM to initiate his own self-introduction to student WM in line 13, followed by a first-meeting greeting token "Nice to meet you" in line 14. In line 15, student WM reciprocally responds to student PM with the same type of token before offering a self-introduction in line 16, treated as a dispreferred action in three-party mediator-initiation interactions (Pillet-Shore, 2011).

In contrast, as a different scenario in Excerpt (20) below unfolds, a mediator-initiated introduction is launched from lines 05-10. Student Nab takes on the role of a mediator and initiates an introduction sequence in line 05. She does this by stating "This is my friend," which sets the stage for the introduction between student Ton and student Pha in lines 06 and 08. According to Pillet-Shore (2011), mediator-initiated introductions can be considered as preferred over self-initiated introductions in three-party mediator-initiation interactions because it aligns with the social norms and expectations of providing relevant personal details when introducing others. In addition, it is considered one of several strategies to demonstrate their adherence to social norms and their orientation towards social expectations.

Excerpt (20) (continued) Making friends - 02

01	Nab:	↑Hi::
02		(.3)
03	Pha:	Hi Nabee
04	Nab:	↑Oh Hi Nang-Phar,
05	Nab:	→ This is my (.2) ah friend,
06		→ she names (.2) Ton,
07		↑Oh Ton? (.2) this (.) she- (.) Umm my friends,
08		→ She name Nang-Phar.
09	Ton:	Nice to meet you ((raises right hand, palm displayed to Nang-Phar))
10	Pha:	Nice to mee you, Ton. ((raises right hand toTon))

As can be seen in Excerpts (19) and (20), the students designed and sequenced their turns to make new friends without offering any information for establishing personal relations with each other after the self- and other-introduction. To facilitate smooth and effective communication, the students should be taught the exchange of personal information after self- and other- introduction. Pillet-Shore (2011) stated that the speakers should offer relevant information about the person to help recipients make sense of unfamiliar persons. Furthermore, acting as mediators, according to Pillet-Shore (2018), speakers can employ their understanding of both individuals being introduced to assist in rapidly establishing a social relationship and common ground.

Apart from the exchange of personal information, forms of conversational humor, such as teasing, mockery and quip, can also be used for rapport-building (Haugh, 2011; Haugh & Pillet-Shore, 2018; Haugh & Weinglass, 2018; Mullan, 2020). However, students should also be made aware of some humor that probably could be offensive and undermine the relationship-building (Maynard & Zimmerman, 1984; Svennevig, 1999, 2014).

### 3.3. Closing Part

As shown in lines 19-20 in Excerpt (21) below, the speakers end the conversation by immediately exchanging good bye in the terminal sequence. It is clear that the learners do not apply any pre-closing sequence signaling to others that the conversation is going to end (Schegloff & Sacks, 1973).

Excerpt (21) (continued) Making friends – 01

13	PM:	My name is PM.
14		Nice to meet you.
15	WM:	nice to meet you too?
16		My name is WM.
17	PM:	((noping his head))
18		(.5)



the conversation is going to end shortly so that they can get ready for the conclusion of a topic, helping to end the conversation or to shift to a new topic more smoothly and appropriately (Liddicoat, 2007; Schegloff & Sacks, 1973).

Therefore, to help the learners become more confident and potent communicators, not only linguistic but also interactional resources such as sequencing practices (Pekarek Doehler, 2010; Kasper & Rose, 2001) should be taught in formal classroom settings. These resources play an essential role in not only developing EFL learners' fluency and accuracy but also facilitating successful communication (Richards & Rodgers 2014; Seedhouse, 2004). Nguoi and Ahmad (2015) suggested that teachers provide learners enough linguistic resources and pair lower proficiency ones with those higher so that they can benefit more from the communicative task used.

Further research should not only expand the sample size and diversity of the sample group examined, but also explore students' challenges in performing other everyday social activities, such as making an invitation, delivering good/bad news, and expressing opinions. In fact, it is important to seriously investigate not only specific problems associated with the undertaking of these social activities in the target language but ways to effectively address them in an English conversation curriculum. The development of some form of CA-informed pedagogy is highly recommended.

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## Appendix A

### Situation Card (Making friends)

#### Situation Card (Making friends)

You and your best friend accidentally run into one of your old friends on the way home. You introduce your best friend to your old friend, and three of you make a small talk before leaving.

## Appendix B

### The Gail Jeffersonian Transcription Convention

Symbol	Meaning
(0.5)	The number in brackets indicates a time gap in tenths of a second.
(.)	A dot enclosed in a bracket indicates a pause in the talk of less than two-tenths of a second.
=	The 'equals' sign indicates 'latching' between utterances.
[ ]	Square brackets between adjacent lines of concurrent speech indicate the onset and end of a spate of overlapping talk.
.hh	A dot before an 'h' indicates speaker in breath. The more h's, the longer the in-breath.
Hh	An 'h' indicates an out-breath. The more h's the longer the breath.
(( ))	A description enclosed in a double bracket indicates a non-verbal activity, or double brackets may enclose the transcriber's comments on contextual or other features.
-	A dash indicates the sharp cut-off of the prior word or sound.
:	Colons indicate that the speaker has stretched the preceding sound or letter. The more colons the greater the extent of the stretching.
!	Exclamation marks are used to indicate an animated or emphatic tone.
()	Empty parentheses indicate the presence of an unclear fragment on the tape.
(guess)	The words within a single bracket indicate the transcriber's best guess at an unclear utterance.
.	A full stop indicates a stopping fall in tone. It does not necessarily indicate the end of a sentence.
,	A comma indicates a 'continuing' intonation.
?	A question mark indicates a rising inflection. It does not necessarily indicate a question.
*	An asterisk indicates a 'croaky' pronunciation of the immediately following section.
↓	Pointed arrows indicate a marked falling or rising intonational shift. They are placed immediately before the onset of the shift.
a:	Less marked falls in pitch can be indicated by using underlining immediately preceding a colon.
a:	Less marked rises in pitch can be indicated using a colon which itself is underlined.
<u>Under</u>	Underlined fragments indicate speaker emphasis.
CAPITALS	Words in capitals mark a section of speech noticeably louder than that surrounding it.
° °	Degree signs are used to indicate that the talk they encompass is spoken noticeably quieter than the surrounding talk.
Thaght	A 'gh' indicates that the word in which it is placed had a guttural pronunciation.
> <	'More than' and 'less than' signs indicate that the talk they encompass was produced noticeably quicker than the surrounding talk.
→	Arrows in the left margin point to specific parts of an extract discussed in the text.
[H:21.3.89:2]	Extract headings refer to the transcript library source of the researcher who originally collected the data.

# Online Learning in Marcuse's Critical Theory Perspective

Marselus Ruben Payong<sup>1</sup>

<sup>1</sup> Universitas Katolik Indonesia Santu Paulus Ruteng. Email: marselpayong@yahoo.com

## Abstract

This article examines Marcuse's critical theory of online learning practices. Some of Marcuse's criticisms of modern society have important relevance for observing the phenomena of learning innovations that are offered today. This research is a literature study with discourse analysis of a number of Marcuse's writings, both written by himself and collected by his followers in a collection of papers after his death. The results of the study show that: 1) educational practices that utilize modern management principles, especially in the form of standardization and homogenization of policies, have the potential to produce a one-dimensional society as criticized in the 1960s. 2) Online learning, as one of the important revolutions in education that uses technology, has the potential to be a new form of slavery; 3) through the use of artificial technology, online learning can be a form of instrumentalization and manipulation in teacher and student interactions; 4) online learning also has the character of automation, which in the end can lead to alienation processes for students, especially psychological alienation and cultural alienation.

**Keywords:** Online Learning, Critical Theory, Instrumentalization, Alienation

## 1. Introduction

The COVID-19 pandemic that has afflicted mankind worldwide since the virus was first discovered in Wuhan, China in December 2019 has fundamentally changed the order of learning. The learning situation has changed completely due to health protocols that must be strictly adhered to prevent or reduce the spread of this outbreak. Something that still feels strange if almost all the learning is done without direct interaction of teachers and students in a certain space and time as usual. Gradually, teachers and students have to become familiar with the new learning mode, namely media learning. Almost all learning content is carried out using media, whether online with various platforms or conventional media such as books, modules, student worksheets, and so on.

The presence of communication and information technology with the support of increasingly sophisticated computer technology lately has also helped increase effectiveness and efficiency in learning. This technology provides the possibility for teachers to use it as an innovative learning medium. Computer technology has also given a new colour to today's learning and has changed the paradigm of education and learning as well as the role of the teacher.

Have the changes, especially in the technology of learning, been in line with the ideals and goals of real education? Has education in these various modes helped real human development and, in the end, created an ideal society,



namely a democratic, fair, and equal society? This article will use Marcuse's critical theory perspective to dissect these phenomena and changes. Because of these changes, whose origins were triggered by extraordinary developments in the field of communication and information technology, Marcuse's perspective deserves to be used as an important critique to open the insights and perspectives of practitioners or stakeholders in the field of education so as not to be lulled by the promises of technology but should continue to direct attention and various efforts to the ideals of ideal human formation through education.

## 2. Discussion

### 2.1. Marcuse's Critical Theory of Education

Herbert Marcuse was one of the 20th century philosophers and social thinkers born in Berlin (1898-1979). He joined the Frankfurt School, and with his colleagues, Max Horkheimer, Th. Adorno, and J. Habermas, they developed critical theory. This school of thought is often referred to as neo-Marxism. Herbert Marcuse's works, especially his critique of modern society, are contained in his famous book, *One-Dimensional Man: Studies in the Ideology of Advanced Industrial Society* (1964). According to Marcuse, humans, in principle, crave happiness and are entitled to it. But the realization of that happiness always brings new forms of oppression. Technology, for example, has created various conveniences for mankind, but, on the other hand, has degraded human dignity. The forms of slavery are becoming increasingly sophisticated, which means they are not carried out by humans on humans but by technology on humans (Kellner, 2001). Technological rationality has become a new mode of life for mankind in this century and has brought the situation of human life into a certain dimension that is characterized by several characteristics such as: instrumentalization, homogenization, standardization, and automation.

In relation to education, Marcuse always sees school in relation to the domination of one-dimensional society's culture. Marcuse strongly opposes such educational practices because they replace the negative with the positive, and on a behavioral and psychological dispositional level, they replace an unhappy consciousness with a happy consciousness. Comparing one-dimensional schools (as social reproduction) with *Bildung* (as a future critical and reconstructive movement) shows a very interesting dialectical analysis of schools according to Marcuse (Marcuse, 1964).

Marcuse claimed in a 1968 lecture at Brooklyn College (Kellner, Lewis, Pierce, and Cho, 2009) that schools have become more paradoxical institutions in a one-dimensional society. On the one hand, sophisticated industrial countries' economies are driven by unrestricted access to and development of information, necessitating the establishment of a stronger universal education system. Education guarantees equality and access to information for people of all social classes. On the other hand, knowledge and reason must be filled with the concepts and ideals of all sections of a developed society, limiting the possibilities of democratic public education. The rise of professional education (e.g., the establishment of corporate institutions such as DeVry and the University of Chicago) helped to overcome these problems.

As a result, Marcuse claims that "modern education is actually sick" (Kellner, Lewis, Pierce, and Kho, 2009), and that it is a type of anti-educational education based on market and military logic masquerading as democratic expansion. Marcuse's one-dimensional social theory can be linked to Erich Fromm's (1955) concept of an insane society. One-dimensional thinking becomes an illness as a result of schooling because it loses its manner of reasoning and is indoctrinated into a full way of life that integrates the conscious, unconscious, and human body into a total administrative system. As education becomes more vital to the economy—which demands educated people like doctors, attorneys, scientists, and technicians—the critical and transformational aspects of education are increasingly controlled, resulting in more types of education. The extreme focus on the production of socially "useful" knowledge in schools, according to Marcuse, is the result of the actual adoption of a militaristic and corporate value framework as opposed to the humanistic one. For Marcuse, this conception of hegemonic rationality that glorifies a one-dimensional, rigid, and neutral attitude towards reality needs to be overcome through education, because in the individual it is inspired by tolerance for the false needs of an aggressive, destructive, and competitive capitalist society.

Therefore, inculcating established one-dimensional societal values through education requires a subjective component that transforms the emancipatory potential of education into a process that accelerates alienation and standardization in the individual learning environment (Saeng, 2012). This process, for Marcuse, begins with the formation of a branch of the human sciences into the humanities, which maintains a transcendent and critical mode of reasoning and the empirical-positivistic social sciences, which are oriented towards rational and scientific organization and understanding of society. For Marcuse, the dominance of empirical-positivistic social science in universities is due to a sterile and uncritical form of knowledge that promotes and demands specialization, professionalization, greater technocratic control, and a strong tendency to venerate methodological models. This division of disciplines led to increasingly branched thinking that was no longer able to conceptualize the totality of social relations and thus remained purely instrumental. The result is a disease of one-dimensional beings that undermines Bildung's multidimensional concept.

When Marcuse examines the contradiction between the welfare state and the military state in the 1960s and 1970s, his thoughts stand out. This can be seen in America's two contradicting policies, *A Nation at Risk* and *No Child Left Behind* (both of which demand "fair educational opportunity") yet are based on capitalism, competition, and state bureaucracy. In the rhetoric of the Cold War, bureaucratic federal measures like these were connected to equality and social dominance through educational standards. In reality, discourses on the welfare state and the development of the state from aggressive wars, in which educational repression is much more prevalent, have begun to alleviate the tensions Marcuse sensed in the late 1960s and early 1970s.

On that basis, Marcuse's criticism became the starting point for theorizing about the current trend in education, which is becoming increasingly intense with one-dimensional standardization. From these irreconcilable tensions, Marcuse theorized new ideas about education. Unlike other radical left thinkers of the time, Marcuse rejected the idea of abolishing universities or public schools, as proposed by Ivan Illich in his *Deschooling Society* (1970). Marcuse uses the term "reschooling" (Kellner, Lewis, Pierce, and Cho, 2009, p. 43). Indeed, for Marcuse, students and higher education institutions should be the mouthpiece of rejection of the one-dimensional society that promotes standardization in schools and universities.

His view of universities in advanced capitalist societies is not entirely negative, as is generally assumed, because in fact, his theoretical approach in his critical theory of society is actually dialectical, as conveyed in his lectures on education, as well as in his interactions with students who fight for a democratic society (Students Democratic Society = SDS) and in his proposed Radical Education Project. Likewise, with his entire life as an educator and radical activist involved with the student movement. Marcuse's publications in the mid-1960s dealt with the rise of the SDS, the anti-war movement, and the groups collectively known as the New Left (Kellner 2005).

Marcuse was fascinated by educational critique and reconstruction, and he recognized how universities and schools could be used as vehicles for progressive social change. Marcuse's commitment to "reschooling," as well as his commitment to critique, is demonstrated in these cases. Marcuse never gave up on critical theory initiatives, and he even urged activist action. Marcuse's university activities were not limited to a few large universities and a few radical student organizations. Marcuse claims that, in the face of growing governmental repression and violence, changes in individual emancipation become the responsibility of tiny educational, political, and psychological groups working together as a single unit, practicing self-education and refusing official education. This job, as a political educator, is primarily intended to remove the mystique and mystery surrounding politics (Kellner, Lewis, Pierce, and Cho, 2009).

Marcuse's conclusion is that students should work together to decolonize objective truth that has become internalized in a one-dimensional society. Marcuse contends, in other words, that education is politics at the psychological heart of the individual. The issue has become politicized as a result of one-dimensional society's repressive and nonsensical status quo, with educational institutions playing a significant role in this process. As a result, Marcuse reminds us that in order to understand progressive and conservative trends in schools, universities, and student movements, liberation must remain a key capacity.

Marcuse's entire dialectical analysis of the school ultimately boils down to another set of higher contradictions that exist between revolution and education. As Marcuse said in his 1975 speech at Berkeley, "We cannot change the goals of education without changing the society that sets these goals," but at the same time, "we cannot wait for revolution." (Kellner, Lewis, Pierce, and Cho, 2009, p. 39). Thus, education is necessary but never in itself a complete answer to the problems of social inequality, racism, classism, imperialism, and sexism. Marcuse's comments here quote the comments of Marx, who once stated, "On the one hand, changes in social conditions are necessary to build a proper educational system; but on the other hand, a proper education system is needed to bring about a change in social conditions." (Marx 1975, 32).

## *2.2. Marcuse and Online Learning*

According to Ally (2004), the phrase "online learning" (e-learning) is often used in the following forms of learning: internet learning, network learning, virtual world learning, computer-assisted learning, remote learning, web-based learning, and so forth. All of these ideas suggest that students are in a location where they are separated from the teacher or teacher, and therefore they need technological aid (typically computers) to obtain learning materials and connect with teachers or even other students.

E-learning, according to Carliner (2004), is educational information displayed on a computer. E-learning is defined by Khan (in Ally 2004) as an innovative strategy to deliver learning to audiences in remote regions via the internet as a medium. E-learning, on the other hand, is more than just the presentation and distribution of information over the internet. According to Ally (2004), e-learning is the use of the internet to gain specific knowledge, construct personal meaning, and grow from the learning experience by accessing learning materials, interacting with learning content, instructors, and other students, and seeking support during the learning process. From the definitions above, it is obvious that online learning (e-learning, online learning) is a style of learning that uses online media to deliver learning and involves interaction between students.

During Marcuse's lifetime, the distance learning mode has developed for a long time by utilizing technology, ranging from correspondence technology to radio and television technology and the internet. From a search of Marcuse's works, there are hardly any specific criticisms or reviews about the mode of distance learning, let alone online learning. Online learning only developed following the revolution in the world of computer technology and integration with telecommunications technology that occurred massively and widely in the 1990s, long after Marcuse's death in 1979. It is therefore natural that this mode of learning escaped Marcuse's spotlight and criticism. However, because distance learning and online learning are part of modern technology, Marcuse's critiques of modern society and civilization gain relevance.

According to Pierce (2009), Herbert Marcuse was one of the first generation of Frankfurt School intellectuals who were obsessed with the function of technology and its impact on society. According to him, the exploitation and formation of human technology through capitalist production machinery characterizes the historical epoch of advanced industrial civilization. It expands the range of social and cultural relations as well as imprisons and debilitates. Under capitalist society, technology and science, for Marcuse, are seen as cultural forms that promote the growth of instrumental reason that seems to constitute human liberation. However, he emphasized that science and technology are by no means neutral or apolitical activities, because they both contribute to and accelerate the decline of the individual's capacity to master critical perspectives on the existing conditions that support developed societies.

All human efforts to improve the quality of life for Marcuse cannot be seen as something that is only based on noble motivation. In the field of education, efforts to improve the quality of education that is carried out systemically should be suspected of being part of a disguised oppression mechanism. This oppression can then be perpetuated, benefiting certain parties at the expense of others, and becoming an inseparable part of all human endeavors to effect change. For example, distance learning or online learning is intended to expand the reach and equitable access to education and produce mass education. But who benefits from this mode? At first glance, many people who have limitations, especially in funds and time, seem to benefit from this mode. But they are actually victims of a wider system, namely the qualifications regime and the credential regime. Because the demands for

qualifications, of course, are not only for their own interests but more for the interests of bureaucrats and capitalists. Work demands, which are partly dictated by technology, make people compete to improve their knowledge and skills. Here, Marcuse sees that there is a hidden oppression carried out by capitalists and bureaucrats using technology.

Before examining specifically, the relevance of Marcuse's critique of online learning, let us consider some of Marcuse's critiques of society and the technology used to advance society. In the book *One-Dimensional Man* (1964), Marcuse highlights the hidden forces behind various masks of goodness that have consciously or unknowingly created oppression and disguised injustice. If we analyze the nature of education comprehensively and systemically, we will come up with several aspects that are the targets of Marcuse's criticism.

Marcuse distinguishes between "technology" (as a mode of production, the totality of instruments, devices, and inventions that characterize a machine) and "technique" (as an instrument and practice, e.g., "industry, transportation, communication") to distinguish systems of mastery of technology from technical devices and their uses. Marcuse distinguishes between technology as a whole and "a means of regulating or changing social relations, a manifestation of prevalent patterns of thought and behavior, an instrument for control and domination," with engineering referring to production techniques and such instruments as automobiles or computers.

Marcuse's critique of technology as a system of domination is an example of how technology, society, and a rationalized economy function as instruments of totalitarian domination, described as a form of "technocracy". Marcuse concludes that technique can bring about abundance for all, eliminating the need for excessive hard work and increasing the realm of freedom. For him, however, technique hinders individual development to the extent that they become so attached to the social apparatus that perpetuates scarcity, and this same apparatus has unleashed a destructive power. For this reason, for Marcuse, all anti-technology programs and all propaganda to carry out an anti-industrial revolution are based on the intention to eradicate the phenomena and impulses of certain parties who only regard human needs as a by-product of using technology. The technique itself has the potential to promote authoritarianism and freedom, scarcity and abundance, expansion and the abolition of hard work (Marcuse in Kellner, 1998: 41). He further wrote:

*Under the impact of this apparatus, individualistic rationality has been transformed into technological rationality. It is by no means confined to the subjects and objects of large-scale enterprises but characterizes the pervasive mode of thought and even the manifold forms of protest and rebellion. This rationality establishes standards of judgment and fosters attitudes which make men ready to accept and even to introcept the dictates of the apparatus (p. 44).*

In this context, Marcuse is on the side of the opponents of technology, especially with the aim of mass production, and thus ignores the growth and development of individuality and freedom. For him, technology is a necessity, but it should be for the glory and enhancement of human dignity, not the other way around, degrading it. For example, technology designed to discipline humans in their work must be able to make humans find their noble dignity in knowing themselves rather than treat them as robots.

### *2.3. Distance Learning Technology as a New Style of Repression in Learning*

Technology, in Marcuse's eyes, is not neutral. It promises ease and efficiency for the work and life of mankind, but at the same time, it can also bring certain disasters (Bertens, 2019). This is not a matter of the negative impact of using technology, but the hidden consequences caused by it, whether we realize it or not. In the context of distance learning or online learning, the use of technology is inevitable because it is also a medium or vehicle for delivering learning.

However, the effectiveness and efficiency of using technology are not only beneficial but, at the same time, can be detrimental to certain groups or parties. Richard Clark criticized distance learning or mediated learning in an article entitled "Reconsidering Research on Media" (Clark, 1983). Clark made a controversial statement that the media had no effect on learning outcomes. He analogized learning media to trucks carrying nutritious food to be

distributed to consumers. It is not the trucks that affect the change in consumer nutrition, but the food in the trucks. Parallel to that, Clark sees the media as not being a dominant factor in influencing the learning process and outcomes, but rather the messages or learning materials that influence learning outcomes.

Clark's opinion caused great controversy, especially among educational technologists at the time, because research on the influence of media on learning outcomes documented for 60 years by Wilkinson (1980) showed relatively consistent results, especially research on the influence of audio and audio-visual media on learning outcomes. According to the researchers, the influence of the media varies depending on the learner's competence. There are media that excel in influencing cognitive competence but are weak in affective or psychomotor competence. On the other hand, there are media that have a superior effect on attitude and behavioral competence but are less effective for cognitive competence. However, in general, the media is still one of the dominant factors, in addition to student psychological factors and other environmental factors that affect human learning outcomes.

Where is the element of "oppression" in the use of this learning technology? *First*, the use of media, on the one hand, benefits students or teachers, but, on the other hand, has worsened the relationship between students and teachers. Dialogic, authentic, and human communication is the hallmark of an educational praxis – because education itself is an "association" that requires neglected affective relationships between teachers and students. Students do not get educational services directly but through the mediation of technology. The presence of the media at the same time has turned the relationship that should be dialogical, authentic, personal, and equal into a subject-object relationship. Students are treated as objects. This kind of system, at the same time, has robbed students of the right to get warmth and relationships that should be personal and affective from the teacher.

*Second*, oppression is also seen in terms of dependence on technology and its various supporting facilities. In online learning, for example, neither students nor teachers are actually free. They are highly dependent on equipment features, internet signal quality, electricity, data pulses, and so on. They are actually controlled by tools, internet networks, data pulses, and so on. Research results on problems in online learning in the era of the COVID-19 pandemic have confirmed this claim (Hidayat, Hashim, and Hamzah, 2020). Third, other oppression actually arises from technology that is completely unrelated to learning. The results of research by Fitri and Lestari (2020) show that because the technology that contains online learning content is in student smartphone devices that also have entertainment features, games, and so on, the concentration and attention of students in learning is actually damaged and deceived by the presence of games and entertainment available on the student's smartphone or tablet. Students prefer to play games and enjoy entertainment (music or movies) rather than do learning tasks given by the teacher. Because for Marcuse, this technology is not neutral. It should be suspected that there are parties who use this technology as a means of slavery for certain groups while other groups hide under the shadow of pleasure gratification.

### 2.3. Instrumentalization and Manipulation

In Marcuse's view, schools or educational institutions are only tools of certain cultural production. Its presence is to satisfy the needs and pleasures of certain groups. Marcuse's critique relates primarily to the never-neutral use of technology. Instrumentalism appears in terms of the use of technology, which makes the rationality of this era technological rationality (Marcuse, 1964). Everything is valued insofar as it can be mastered, used, manipulated, or handled. The key word in technological society is instrumentalization (Bertens, 2019). That is, at first, the instrumentalization way of thinking was only applied to nature, but then it became commonplace to be applied to humans and various other fields of social life. In other words, not only nature and machines are manipulated and manipulated, but also humans can be manipulated and manipulated.

In his famous book, *High Tech, High Touch*, Naisbitt (2001), says that humans in this century live in a zone called the technologically intoxicated zone. Technology has mastered all aspects of human life, and the way humans think and act is also controlled by technology. Allocca (2020) also provides an example of how Youtube has dictated and influenced the tastes of mankind worldwide. Likewise, studies on internet addiction have shown adverse effects on human psychology (Price, 2011; Young & Abreu, 2011; Bozoglan, 2018; Nakaya, 2015; Montag & Reuter, 2017).

The result of instrumentalization is the existence of certain manipulations in the form of engineering in the environment and circumstances, including the learning environment. And what Marcuse hinted at is currently happening. Our current social life is colored by various engineering (social engineering), namely tactics or designs for certain social innovations that have good goals or are "as if" good, but behind them contain hidden goals for the benefit of parties or groups. certain. Good ideas or ideas that, when implemented, have unintended consequences that benefit certain parties, whether they realize it or not.

Online learning or media clearly has an instrumentalization character because it utilizes technology for delivery. The packaging of teaching materials in learning technology also naturally contains elements of manipulation and engineering. Since the technology in Marcuse's perspective is neither value-free nor neutral, what needs to be scrutinized is who benefits and who is disadvantaged in using this technology.

For students and teachers, it may be a temporary advantage because obstacles such as space and time can be overcome. The learning process can run well. But on the other hand, engineering learning technology can be ridden by other actors who may have noble intentions. For example, telecommunications actors, internet providers, programmers, and computer vendors can benefit from this phenomenon. Distance learning technology is a high-tech technology that, of course, requires a large amount of capital to provide it. The government's large investment in the provision of these services, of course, requires funds that are obtained from the public through taxes. Therefore, even though the government initiates and provides financing related to online learning services, many people, especially those who are less fortunate, are in a weak position. Moreover, until now, some online learning devices are still borne by students (smartphone devices, laptops, even internet credit).

#### *2.4. Automation and Alienation*

Technology also hints at the automation of work processes. If the work is done by a machine, following the workflow and logic of the machine without extensive human control, the process is an automated process. In media learning or online learning through programming of the content, appearance and learning environment, the human relationship in this case the teacher and student is controlled by technology that transcends space and time. In online learning with asynchronous mode (asynchronous), the interaction between teachers and students or students with students is limited. Students only deal with technology that has been set up to deliver learning automatically. This automation process runs en masse, involving many parties ranging from policy makers, executors, namely from the design stage (there are curriculum experts, pedagogues, psychologists, media and communication experts, field experts, and computer programmers) and students as consumers. This long process then produces products in the form of learning media, learning resources, printed teaching materials, teaching materials in media packaging, and online teaching materials, including an evaluation system and determination of student competencies. The environment is also engineered in such a way through technology, imitating the social and psychological environment of humans, so as to make learning interactions that are actually artificial become as if authentic.

This automation process takes place repeatedly so that it follows a one-dimensional pattern, and makes human relationships one-dimensional. This means that what is experienced by students from various parts of the world in online learning at least follows the same flow and way of working, let alone using a relatively similar learning management system (LMS). So, the result is a one-dimensional mindset, way of working, and assumptions. Take, for example, students who study in synchronous mode such as Zoom, Google Meet, Microsoft Teams, following the same technological flow and logic. Likewise, those who use asynchronous mode such as Moodle, Google Classroom, although with different features, but have the same relative rationality. This process gave birth to homogenization in the way of thinking and working.

The automation process was born from the logic of technological thinking which is linear and this logic is forced on anyone to use. Teachers and students in their learning interactions also follow this kind of linear logic of technological thinking. Technological logic comes from a positivist way of thinking which is strongly opposed by Marcuse (Saeng, 2012). Technological logic does not know the language of love or the language of the heart. Technology has its own logic that cannot be intervened by humans. How can technology understand the language

of the human heart? This is hard to do. For example, students who take a promotion exam or final exam online. The exam mechanism has been regulated through the system such as implementation time and completion time limit. Following the logic of such a system, students do not have real freedom, it is not even easy to use their creative thinking to solve problems. Due to time demands, students are forced to work according to the time frame that has been set through the system. If the student is late in pressing the button or clicking the computer mouse too late, the opportunity for him will be lost. The technological system does not recognize the language of the heart that puts forward human considerations so that this kind of phenomenon cannot be forgiven. This is quite different from if teachers and students interact in a certain space and time, human considerations can be one of the bases for deciding student learning abilities and performance.

Automation that occurs continuously gives birth to humans like robots who must obey the system and how it works. This phenomenon can give birth to alienation, namely a sense of alienation and self-emptiness. Pappenhaim (1959) notes that many people perceive alienation differently. For example, theologians and philosophers have long warned that advances in scientific knowledge have not been able to enable humans to unravel the divine mysteries, and on the contrary, make humans increasingly alienated from their natural environment. Meanwhile, by critics or social scientists, alienation is the result of the increasing mechanization of life due to technological advances that lead to automation.

Powell (1995) says that the most tragic paradox of this era is that humans discover so much about their world but are increasingly alienated from it, from the reality of their environment. The technology that has been produced by humans has hindered humans from interacting with their world even with each other by default. You can imagine, to communicate with neighbours, even convey condolences to friends, they use the media, even though they are still in the same city. There is an emotional void that results from being replaced by technology.

Criticisms of human alienation have long been voiced, especially by Karl Marx and the adherents of Marxism (Wendling, 2009; Comninel, 2019). For Marxists, human alienation is rooted in the problem of capitalism, which exploits human power for the purpose of accumulating capital. As a result of the exploitation of human labour, humans lose the freedom to realize themselves. In the context of media learning, alienation of course does not arise as a result of slavery as criticized by Marx and his supporters, but alienation can arise because individual students can be uprooted from their cultural roots, are not free to explore nature and their environment, lose opportunities to interact with their peers, friends or people around. In the context of online learning due to the Covid-19 pandemic, alienation is getting stronger due to the limited interaction of students with teachers, students with students and even with their game friends due to the demands of the health protocol.

### 3. Conclusion

Marcuse's ideas and critiques on education remain relevant in today's information technology age, as evidenced by the above description. Although Marcuse's criticism of technology at that time was more related to manufacturing technology, which had robbed and deceived humans under the shadow of modern capitalism, Marcuse's criticism was still very relevant and actual to the living conditions of mankind in the information age.

In the context of 21st century learning, where most learning modes use media or online, Marcuse's criticism targets several things: 1) homogenization of learning modes can result in a decline in students' reasoning and critical thinking. Students are not given sufficient space to express their freedom of thought because their thoughts have been programmed to focus on a certain truth; 2) The technology of learning can also result in the emergence of new forms of slavery that are real and vague under the pretext of efficiency and effectiveness. It is possible for capitalist players to enter through invested technological innovations, and this also deprives students of individual freedom in choosing and expressing educational aspirations; 3) standardization of the management of education and learning openly maintains the character of a one-dimensional society. This character emerges and is maintained because it is dictated by technology, which increasingly robs and enslaves human freedom.

Not all of Marcuse's criticisms can trigger dialectics and discourses to develop new innovations both in the management of education and in learning, but Marcuse's criticisms still open our horizons and awareness not to

entrust the fate and future of mankind solely to technology. Marcuse's criticism also made people aware of this century, especially policymakers in the field of education, to always be careful and maintain their critical awareness in deciding policy innovations aimed at improving the quality of education. Any good intentions to update and improve services are something that should be welcomed, but we are still reminded to be aware of the dangers of certain groups who can benefit or otherwise who will become victims of policy innovations. In its deepest essence, all policies and innovations to improve the quality of education should be returned to the highest measure of educational attainment, namely the nobility of autonomous human dignity. Marcuse does not offer new or creative ideas for how to achieve these lofty goals, but rather reminds us through his sharp analysis of various situations and conditions in modern society that they should always be the starting point for consideration when developing innovations or policies for the benefit of many people.

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# A Study on Educational and Training Needs Assessment of Professionally Active Agronomists in the Area of Central Macedonia, Greece

Evgenia Efthymiadou<sup>1</sup>, Efthymios Valkanos<sup>2</sup>, Marios Koutsoukos<sup>3</sup>, Maria Sytziouki<sup>4</sup>

<sup>1</sup>Adult Educator, Agronomist MSc., MA in Adult Education University of Macedonia, Greece

<sup>2</sup>Professor, University of Macedonia, Greece. E-mail: evalkan@uom.edu.gr

<sup>3</sup>Agronomist-Adult Educator, Ph.D., Hellenic Open University, Greece. E-mail: koutsoukos.marios@gmail.com

<sup>4</sup>Assistant Professor, University of Macedonia, Greece. E-mail sitziouki@uom.edu.gr

Correspondence: Evgenia Efthymiadou. E-mail: eefthy@afs.edu.gr

## Abstract

The aim of this study was to investigate the educational and training needs of agronomists in the region of Central Macedonia in Greece, a region with significant contribution to the Greek agricultural economy. Data was collected through an electronic survey by a sample of 127 agronomists. A quantitative survey with a non-probability sampling was conducted, snowball sampling method was applied and descriptive tools were used to present the results in the form of means, percentages, standard deviations, analysis of variance and correlation analysis. Conclusions indicate differences in gender as they prioritize educational needs and a positive linear correlation between professional experience and the number of training programmes attended. High need of training declared in the subjects of Precision agriculture, Precision livestock farming & Use of new technologies. Low need for training declared in the subjects of Livestock production and farm animal disease control, Dairy farming, Protected agriculture, Floriculture management, Poultry farming and Fish farming technologies.

**Keywords:** Agronomists, Education, Educational Needs, Lifelong Learning, Training Needs, Training Programmes

## 1. Introduction

Agriculture and rural economy in Greece contribute to a percentage of 4.3% to the total GVA. GVA is the economic productivity metric, which is higher in Greece in the agricultural sector, if it's compared with the average European GVA that reaches the percentage of 1.6%. Even during the financial crisis in Greece from 2009 to 2013 and the health issue crisis due to the Covid-19 pandemic from 2019 to 2022, the agricultural sector in Greece has shown great resistance and managed to efficiently supply quality agricultural products to consumers (Klonaris, 2021).

In Greece, the agricultural sector plays an irreplaceable role as a key economic factor, providing employment for a large part of the society, ensuring the necessary social cohesion and regional development. The percentage of rural population in the Greek sector is maintained at higher levels throughout the time in comparison to the rest of the European Union members (Paschalidis et al., 2021). It is also a fact that agriculture in the Mediterranean region in general, faces various challenges and the main reason is the existence of constant interplays between production factors such as traditional agricultural practices, change in the climate, size of the land holdings, aging of rural population and the environmental and social need for engaging with sustainability issues by all the participants of the agricultural sector (Iakovidis et al., 2023).

Due to current challenges as mentioned above, agronomists should include in their objectives the prospect of continuous vocational training on sustainable development agricultural subjects, technology and innovation matters and to reform their approaches from sales oriented to advisory centered in order for the farmers, who are the final recipients of the agronomical guidance, to alter their aspects of farming accordingly (Iakovidis et al., 2023). The contribution of agronomists plays a crucial role in rural development and the success of the agricultural services they offer through counseling is mainly dependent on their training (Shah et al., 2013).

Additionally, agronomists, must keep up with the increased demands of modern times. This is reflected by the existence of many relevant distance training courses organized by universities both in Greece and abroad, such as the Agricultural University of Athens, the National and Kapodistrian University of Athens, the University of Patras, the Hellenic Open University, as well as other private institutions (Kazana et al., 2019). The Geotechnical Chamber of Greece, which is the competent body for the professional establishment of agronomists, has occasionally carried out courses for the training of agronomists. The educational programmes are on a fee basis and lead to the issuing of a certificate. There is online information on these actions which goes back to 2008, as it can be ascertained from the official website of the Geotechnical Chamber of Greece <https://www.geotee.gr/>. In 2021, within the framework of funding programmes of the European Union the “Training and Certification of Skills and Competences of Workers in the field of agricultural waste management and in hygiene, safety and food quality control” programme was carried out, as it can be seen by the official webpage of the action <https://katartisi.geotee.gr/>. Also, the contribution of the American Farm School of Thessaloniki to the agricultural education of agronomists in the Greek region, is also of great importance. All programmes aim to promote knowledge and skills among adults in an innovative and interactive approach. The American Farm School specializes in Agricultural Adult Education and agronomists attend trainings in order to improve their competitiveness as it can be seen by the official website <https://www.afs.edu.gr/>.

Lack of information concerning the educational and training needs of agronomists is an important issue and affects the efficiency of the training programmes (Msuya et al., 2017). The improvement of professional skills and the job efficiency enhancement of agronomists are both connected with the implementation of the training they receive in compliance with their training needs (Chizari et al., 2006) and in order to have educational and training programmes that meet the needs of agronomists, is a priority to identify the educational needs so as to achieve the educational goals, efficiently and soon as possible (Saleh et al., 2016).

In the previous decades, research on the educational and training needs of professionally active agronomists had been done only to a limited extent. Specifically, in 2012, Gerakari Chrysoula published her dissertation “The training needs of the Agricultural employees of the Public Sector: an empirical investigation in the Regional Unit of Pella of the Region of Central Macedonia, based on their perceptions”. According to the results of the survey, the participating agronomists acknowledged the importance of training and expressed the opinion that the training programmes they had attended were lagging behind in terms of practical applications and experiential learning methods.

Regarding the most recent studies identified, it is worth noting that the samples of the surveys are not focused on professionally active agronomists. Thus, the most recent research identified was the study of Charatsari et al. (2023) titled "Competencies Needed for Guiding the Digital Transition of Agriculture: are Future Advisors Well-Equipped?". The sample of the study consisted of undergraduate students at a Greek Agronomy

Department University and the findings of the survey revealed that future agronomist's skills regarding the digital transformation of agriculture and technology issues were considerably low.

Therefore, in order to comply with the contemporary demands, it is crucial to focus even more thoroughly on the educational and training needs of agronomists in the Greek region in order to enhance their skills and expertise. In order for this to be implemented methodically, it is necessary to have previously investigated the educational and training needs of agronomists and this is the main goal of the present study. The originality of the present study resides in the fact that its sample consists of professionally active agronomists and the rarity of similar studies highlights its significance.

The choice of the region of Central Macedonia as the main study area, is justified by the importance of the specific area in terms of crop and livestock production on a national level and on its major contribution to the agricultural economy of Greece. It is also worth mentioning that the region of Central Macedonia is the largest and second most populous region in Greece (Maniati et al., 2022). The significance of the topic, due to the pivotal role of agronomists concerning the growth of the countryside economy, the development of the manufacturing procedures in the agrifood chain, as well as the fact that the specific sector has not been studied in depth in Greece during recent years, lead to the conclusion that there is urgent need the specific topic to be investigated vigorously. As a consequence of all the above, the present study was undertaken to identify the educational and training needs of professionally active agronomists in Central Macedonia, Greece.

The objectives of the research are:

- To investigate whether the respondents have already attended training programmes and to determine the number of them,
- To explore their point of view regarding the subjects in which they would like to be trained,
- To determine if educational and training needs differ in relation to gender, age, education and years of work experience on the agrifood sector.

## 2. Methodology

The survey was carried out in Central Macedonia and it was based on a questionnaire designed by Prof. of Agricultural extension, Kshash Bassim Haleem from Al-Qasim Green University, Agricultural College in Babylon, designed to investigate the training needs of agronomists working as extension agents in a particular area in Iraq. Content validity of the questionnaire was established by a panel of experts in the field of agriculture and a pilot study was conducted to establish the reliability of the instrument (Kshash,2018). Written permission to use the questionnaire was requested, as well as a copy of the questionnaire structure. After the positive response of the researcher, the double and reverse translation of the questionnaire was done.

The population of the present study consists of 127 agronomists who are professionally active in Central Macedonia. The questionnaire reliability was tested by 5 agronomists located in Central Macedonia and during this pilot study some extra training items were suggested by the colleagues to be included in the questionnaire. The instrument of the research is a three-part questionnaire. It includes 5 demographic questions, 30 Likert scale questions and 1 open-ended question. A Cronbach's alpha reliability coefficient of 0.96 was established, indicating the reliability and validity of the instrument. Training needs were measured on a 5-point Likert-type scale of very highly needed (4), highly needed (3), moderately needed (2), slightly needed (1), and not needed (0).

Initially, the questionnaires were sent electronically through personal contacts to fellow agronomists professionally active in the area of Central Macedonia. Further contacts were made to confirm the receipt of the questionnaires and to make a personal request for their completion. Then the snowball sampling method was applied to collect a sufficient number of responses from colleagues professionally active in Central Macedonia and data was collected from 25th July 2022 to 1st September 2022.

Data was analyzed using IBM SPSS Statistics 28.0. Descriptive tools were used to present the results in the form of means, percentages and standard deviations. Furthermore, the study utilized inferential analysis such as one-

way analysis of variance to explore the differences among extension agent's interest in participating in training regarding their personal attributes.

### 3. Results

#### 3.1 Characteristics of agronomists

127 agronomists that are professionally active in Central Macedonia have completed the questionnaires and the description of the sample is shown at Table 1. The variables the study was focused on, are the following: Gender, Age, Highest level of education completed, Years working in the agricultural sector and Number of training programmes attended by the participants.

Table 1: Description of the sample

Variables	Variable Analysis	Percentage
Gender	Male	36%
	Female	64%
Age	20-29 Yrs.	18,1%
	30-39 Yrs.	28,3%
	40-49 Yrs.	44,9%
	Above 50 Yrs.	8,7%
Highest level of education completed	Master's Degree	56,7%
	University Department Degree	25,2%
	Technological Educational Institute Degree	11%
	Ph.D	5,5%
	Postdoctoral Research	1,6%
Years working in agricultural sector	Less than 1 year	15%
	1-5 Yrs.	28,3 %
	6-10 Yrs.	24,4%
	11-20 Yrs.	26,8%
	21-30 Yrs.	3,9%
	Over 30 Yrs.	1,6%
Number of training programmes attended	0	18,9%
	1-5 Programmes	63%
	6-10 Programmes	12,6%
	11-15 Programmes	3,9%
	Over 15 Programmes	1,6%

As per their gender 36 % were men while 64% were women. Most of the agronomists in the survey belong to the age group of 40-49 years with their percentage amounting to 44.9%. This is followed by the 30-39 age group with a percentage of 28.3%.

Regarding the participants' education level, they were asked to mark the highest educational level to which they belong. Most of them hold a Master's degree with their percentage reaching 56.7%. Lower percentages are occupied by those who have completed a Ph.D. with a percentage of 5.5% and finally those who have completed postdoctoral research, holding a percentage of 1.6%.

Regarding professional experience and years of service in agricultural sector, 6 classes were created. The largest percentage 28.3% has to 1-5 years of experience, 26.8% has 11-20 years of experience and 24.4% has 6-10 years of experience. The smallest percentage 1.6% appears in the previous service of more than 30 years. It is worth emphasizing the high percentages of respondents, 43.3% in total, having "Less than 1 year" and "1-5 years" of

experience, a percentage for their employment that is justified by the short-term contracts which consist a common form of employment occupation in the agricultural sector in the Greek region. (Karamanis et al., 2022).

Regarding the training programmes attended by the agronomists in the sample: 63% of respondents have attended 1-5 training programmes, 18.9% of respondents have not attended any programme, while 12.6% of the participants have attended 6-10 programmes. Furthermore, 3.9% of respondents have attended 11-15 programmes and 1.6% of the sample have attended 15 programmes or more. We therefore conclude that there is a positive attitude towards training, a fact that also coincides with Gerakari's (2012) research on agronomists in the Greek region.

### 3.2 Educational and training needs of agronomists

With respect to agricultural sectors in which agronomists need education and training, data is presented in Table 2 according to their rank order. In the highest ranking order, participants declare their need for education and training in the subjects of Precision agriculture- Precision livestock farming & Use of new technologies, followed by the subjects of Planning and implementation of agricultural advisory programmes, Certification of rural and food products, Marketing of agricultural products, Organic farming, Climate change, Environmental protection and sustainable management of ecosystems, Agricultural aid and subsidies in the agricultural sector, Added value of agricultural products, Integrated plant protection and Food Industries.

In the medium ranking order, educational and training needs are reported in the following subjects: Organic livestock farming, Farm management, Soil management and soil conservation, Determination of farmer's training needs, Information and Communication Technology (ICT), Beekeeping, Postharvest technology, Reduced tillage methods, Integrated Pest Management (IPM), Digital skills and use of social media for professional purposes, Management of fruit and vegetable crops, Irrigation systems and water resources management, Management of vegetable crops, Soil management and soil conservation, Determination of farmers training needs.

However, the least important educational and training needs are reported in the following subjects: Livestock production and farm animal disease control, Dairy farming, Protected agriculture, Floriculture management, Poultry farming, Fish farming technologies.

Table 2: Weighted mean and level of educational & training needs in agricultural areas

<b>Agricultural sectors in which Agronomists need education &amp; training</b>	<b>Weighted Mean</b>
Precision agriculture- Precision livestock farming & Use of new technologies	3,61***
Planning and implementation of agricultural advisory programmes	3,54***
Certification of rural and food products	3,54***
Marketing of agricultural products	3,48***
Organic farming	3,46***
Climate change	3,45***
Environmental protection and sustainable management of ecosystems	3,45***
Agricultural aid and subsidies in the agricultural sector	3,45***
Added value of agricultural products	3,38***
Integrated plant protection	3,36***
Food industries	3,30***
Organic livestock farming	3,28**
Farm management	3,27**
Soil management and soil conservation	3,26**

Determination of farmer's training needs	3,24**
Information and Communication Technology (ICT)	3,16**
Beekeeping	3,16**
Postharvest technology	3,15**
Reduced tillage methods	3,14**
Integrated Pest Management (IPM)	3,11**
Digital skills and use of social media for professional purposes	3,09**
Management of fruit and vegetable crops	3,08**
Irrigation systems and water resources management	3,06**
Management of vegetable crops	3,02**
Livestock production and farm animal disease control	2,95*
Dairy farming	2,94*
Protected agriculture	2,92*
Floriculture management	2,83*
Poultry farming	2,69*
Fish farming technologies	2,46*

\*\*\*= high; \*\*=medium; \*=low.

According to research that has been carried out in the past, it is concluded that the agricultural education system in Greece, is not particularly focused on enriching agronomists with practice-oriented knowledge or with the contemporary requirements of the agrifood sector (Koutsouris& Papadopoulos, 2000). As it is presented in Table 3, the conclusion of this survey supports the need for practice-oriented subjects, since 33.1% of our sample declared that more training is required in subject "Management of fruit and vegetable crops", 30.7% declares that more training is required for the subject "Farm Management" and 30.7% declares more training is needed in the subject "Irrigation Systems and water resources management"

Table 3: Percentage per subject for Practice Oriented Subjects

<b>TRAINING NEEDED</b>	<b>Management of fruit and vegetable crops</b>	<b>Farm Management</b>	<b>Irrigation systems and water resources management</b>
Not needed	12.6%	11%	8.7%
Slightly needed	18.1%	15.7%	26%
Moderately needed	33.1%	30.7%	30.7%
Highly needed	21.3%	20.5%	19.7%
Very highly needed	15%	22%	15%

Furthermore, regarding training needs on Sustainability oriented subjects, as it can be noticed by Table 4, 29.9% of the respondents stated that they training is "Very highly needed" in the area, "Environmental Protection and Sustainable Management of Ecosystems" which is also confirmed by research that concludes that agricultural education in Greece does not enhance the ability of agronomists to specialize in issues related to sustainability (Österle et al., 2016). The percentages of the need for training regarding the subject "Climate change" are also high, since 26% of the agronomists declared this subject in high need for training and 26.8% stated as a "Very highly needed" training area, a result that also agrees with the conclusions of Kshash (2018) research on agronomists, where the need for training for the specific subject is stated to a great extent. As far as Organic farming is concerned, 28,3% described it as a "Very highly needed" subject.

Table 4: Percentage per subject for Sustainability Oriented Subjects

<b>TRAINING NEEDED</b>	<b>Environmental Protection and Sustainable Management of Ecosystems</b>	<b>Climate change</b>	<b>Organic farming</b>
Not needed	7.9%	7.9%	6.3%
Slightly needed	18.1%	18.9%	18.9%
Moderately needed	25.2%	20.5%	25.2%
Highly needed	18.9%	26%	21.3%
Very highly needed	29.9%	26.8%	28.3%

Regarding training needs on subjects that focus on the added value of agricultural products, it is worth noting that the subject entitled “Certification of agricultural products and food” is of high interest according to 31.5% of our sample and the subject “Marketing of agricultural products” gathered 29.1% of the sample stating that in terms of training is a “Very highly needed” subject. The subject that gathers a remarkable percentage in terms of the need for training is the subject of “Postharvest technology” where 40.2% of the agronomists of the survey answered that they moderately need training, a result that also complies with the conclusions of the research of Kshash (2018) regarding agronomists. In this particular research is stated that the prevention of post-harvest production loss has multiple dimensions and training programmes as well as further training in this area is necessary to be applied. This is explained by the fact that one of the challenges faced by farmers in many cases is post-harvest product losses, 10% and 22% of the products are downgraded before reaching the final consumer due to insufficiency of technical knowledge (Taiwo& Bart, 2016). However, the provision of services in the field of postharvest handling procedures is highly dependent on the knowledge of agronomists regarding postharvest handling of fresh agricultural products (Del Carmen, 2016).

Table 5: Percentage per subject for Added Value Oriented Subjects

<b>TRAINING NEEDED</b>	<b>Certification of agricultural products and food</b>	<b>Postharvest Technology</b>	<b>Marketing of agricultural products</b>
Not needed	3.9%	3.1%	6.3%
Slightly needed	22.8%	24.4%	16.5%
Moderately needed	19.7%	40.2%	29.1%
Highly needed	22%	18.9%	18.9%
Very highly needed	31.5%	13.4%	29.1%

Subjects related to animal production are less popular between agronomists, as it can be seen by Table 6. The subject “Fish farming technologies” gathered low interest percentages from the agronomists in terms of the degree of training and 36.2% of the respondents answered that they do not need training on this field. Also, 19.7% of the respondents answered that they do not need training on “Dairy farming”, 26% rejected training needs on “Poultry farming” and 22.8% on “Animal production and disease control of farm animals”.

Table 6: Percentage per subject for Animal production Subjects

<b>TRAINING NEEDED</b>	<b>Fish farming technologies</b>	<b>Dairy farming</b>	<b>Poultry farming</b>	<b>Animal production and disease control of farm animals.</b>
Not needed	36.2%	19.7%	26%	22.8%
Slightly needed	16.5%	20.5%	18.9%	15.7%
Moderately needed	23.6%	22.8%	29.1%	22.8%
Highly needed	11.8%	19.7%	11.8%	20.5%
Very highly needed	11.8%	17.3%	14.2%	18.1%

The set of answers at the open-ended question is of particular interest, noteworthy are answers that refer to modern concepts such as regenerative agriculture, biodynamic agriculture, agroforestry systems, energy crops, but also subjects such as the mental health of the rural population. The subject of “Teaching agricultural courses”



was also mentioned, which indicates that many agronomists are occupied in the field of education in Greece, a topic that was mentioned by Miltiadou (2012), investigating the educational needs of the specific professional sector.

Regarding the answers to the open-ended question, it can be concluded, based on the variety of answers, that the professional subjects that agronomists are occupied with, present a wide variation. This particular situation does not facilitate the specialization of agronomists on a specific professional agricultural field (Ingram and Morris, 2007). It is worth focusing on the answer that refers to the outdated knowledge taught in Universities in the Greek region and the need for individual action in terms of upskilling, a point of view that also converges with the conclusion of Gerakari's research (2012), mentioning that although the level of scientific knowledge is high, the agronomists lag behind in modern knowledge as well as in new techniques and they strongly express the desire to update their knowledge in order to be informed about recent developments in their scientific field. Almost a decade later, is worth mentioning that the opinions of the respondents are quite similar as it can be concluded by the present study.

### 3.3 Statistical relationship between selected characteristics of agronomists and educational and training needs

In order to determine the statistical relationship between the educational and training needs score of each of the respondents and selected characteristics of the agronomists, correlation analysis was conducted. One of the main research questions of the study aims to investigate whether and to what extent the educational needs of agronomists differ, depending on Gender, Age, Studies and Professional experience as agronomists. To achieve the above goal, Analysis of Variance (ANOVA) was applied, with the dependent variables being the educational objects of the questionnaire and the independent variable being in each analysis separately: a) Gender, b) Age and c) Studies d) Professional experience as an agronomist.

The data that showed statistically significant differences are presented below. The analysis and explanation of the statistical analysis at Table 7, is entitled "Descriptives" where the descriptive statistics are presented such as Means and Standard Deviations. Analysis of Variance (ANOVA) at Table 8, is listed for each variable, showing through the analysis of variance, the p-value, which if  $<0.050$ , indicates that there is a statistically significant difference. Regarding the gender of the sample, the results obtained, ( $F(1,125) = 3,914$ ,  $p=0,05$ ) show statistically significant differences regarding the training of the items "Planning and Implementation of Agricultural Advisory Programmes" and women seem to be more interested (Mean=2.70, S. D=1.21) than men (Mean=2.26, S. D=1.20) in the specific subject.

Table 7: Planning and Implementation of Agricultural advisory Programmes/ Descriptives

	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Min.	Max.
<b>Man</b>	46	2.26	1.219	0.180	1.90	2.62	0	4
<b>Woman</b>	81	2.70	1.209	0.134	2.44	2.97	0	4
<b>Total</b>	127	2.54	1.226	0.109	2.33	2.76	0	4

Table 8: Planning and Implementation of Agricultural advisory Programmes/ Anova

	Sum of squares	df	Mean Square	F	Sig.
<b>Between Groups</b>	5.753	1	5.753	3.914	0.050
<b>Within Groups</b>	183.758	125	1.470		
<b>Total</b>	189.512	126			

Also, as shown in the Table 9 and Table 10, statistically significant differences in terms of the sample's gender appears to exist in the educational subject " Precision agriculture- Precision livestock farming & Use of new technologies" where ( $F(1,125) = 5.793$ ,  $p=0.018$ ). Women seem to be more interested (Mean=2.80, S. D=1.077) than men (Mean=2.26, S. D=1.43) in the specific subject.

Table 9: Precision agriculture- Precision livestock farming &amp; Use of new technologies/ Descriptives

	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Min.	Max.
<b>Man</b>	46	2.26	1.437	0.212	1.83	2.69	0	4
<b>Woman</b>	81	2.80	1.077	0.120	2.56	3.04	0	4
<b>Total</b>	127	2.61	1.242	0.110	2.39	2.82	0	4

Table 10: Precision Agriculture- Precision Livestock &amp; Use of new technologies/Anova

	Sum of squares	df	Mean Square	F	Sig.
<b>Between Groups</b>	8.606	1	8,606	5,793	0,018
<b>Within Groups</b>	185.709	125	1,486		
<b>Total</b>	194.315	126			

The Analyzes of Variance with independent variables the age, studies, years of experience did not show statistically significant differences in relation to the educational objects, which means that the opinions of the agronomists, regarding their training needs in the specific educational objects converge. Also, from the Table 11 of Correlations, is observed that there is a positive linear correlation between “Professional Experience” with the “Number of training programmes attended”, where Pearson Correlation is  $r = 0,284$ , that means that as professional experience increases it can be observed that the number of training programmes attended by agronomists also increase.

Table 11: Correlations

		Number of training programmes attended	Professional Experience
<b>Number of training programmes attended</b>	Pearson Correlation	1	,284**
	Sig.(2-tailed)		,001
	N	127	127
<b>Professional Experience</b>	Pearson Correlation	,284**	1
	Sig.(2-tailed)	,001	
	N	127	127

\*\* Correlation is significant at the 0.01 level (2-tailed)

#### 4. Discussion

The agrifood sector is traditionally considered one of the most dynamic and economically growing sectors in Greece. Especially in recent years, it has been characterized many times as one of the main economic pillars of the Greek countryside (Paschalidis et al., 2021). To a very large extent, the course of the agrifood sector depends on the contribution of agronomists, holding a pivotal role in the development of the specific sector through their active role providing consultancy as well as their contribution to the processing chain of raw materials. Acquiring modern and up-to-date knowledge is nowadays of the utmost importance and agronomists must be receptive to innovation (Lefèvre et al., 2014) while they also need to expertise in a variety of traditional technical issues (Gómez et al., 2015), thus training is a prerequisite for their professional development. In order for this to be implemented methodically, it is necessary to have previously investigated the educational and training needs of the agronomists and this is the main goal of the present research.

From the results of the present research, it can be concluded that, as regards to the educational and training needs, the majority of the respondents declared their need of training in the subjects of Precision agriculture- Precision livestock farming & Use of new technologies, followed by the subjects of Planning and implementation of agricultural advisory programs, Certification of rural and food products, Marketing of agricultural products, Organic farming, Climate change, Environmental protection and sustainable management of ecosystems, Agricultural aid and subsidies in the agricultural sector, Added value of agricultural products,

Integrated plant protection as well as Food Industries. At medium level need are the following topics: Organic livestock farming, Farm management, Soil management and soil conservation, Determination of farmer's training needs, Information and Communication Technology (ICT), Beekeeping, Postharvest technology, Reduced tillage methods, Integrated Pest Management (IPM), Digital skills and use of social media for professional purposes, Management of fruit and vegetable crops, Irrigation systems and water resources management, Management of vegetable crops, Soil management and soil conservation and Determination of farmers training needs. However, the subjects in which they require low level training are the following: Livestock production and farm animal disease control, Dairy farming, Protected agriculture, Floriculture management, Poultry farming, Fish farming technologies. Worth mentioning is the fact that a percentage of 63% of the respondents have attended 1 to 5 training programmes while a percentage of 18.9% of the respondents have not attended any programme at all. The high percentage, however, of respondents who have not attended any programme can be explained by the fact that most training programmes in Greece are subjected to fees of participation as mentioned above.

The Analysis of variance with the independent variables of age, studies, years of work experience did not feature statistically significant differences in relation to the training subjects, which means that the opinions of agronomists, regarding their training needs in the specific educational subjects converge. The variable "Gender" presented a statistically significant difference with the training subjects "Planning and implementation of agricultural advisory program" and "Precision agriculture- Precision livestock farming & Use of new technologies". By the variety of answers at the open-ended question, it can be concluded that the professional interests of agronomists present a wide variation, to the point that it is difficult for the agronomists to be specialized in a specific field. This particular finding comes to an agreement with the statement that agronomists in order to perform this role effectively, need to acquire a broad understanding of the agroecosystem (Ingram and Morris, 2007) and the intention to be educated on several topics on the agricultural sector in order to develop a new professional mindset that emphasizes in multiple skills and mental transformation through continuous learning procedures (Charatsari et al., 2018). The fact that as professional experience increases the number of training programmes attended by agronomists also proliferate, complies with the fact that in an environment that is constantly evolving and in which professional needs are constantly increasing, lifelong learning and education plays a major role in order for the agronomists to keep abreast of developments in current professional environment.

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# The Effects of the Combined Training Program on Agility in Football Players

Somchai Thammathes<sup>1</sup>, Singha Tulyakul<sup>2</sup>

<sup>1</sup> Student at the Master of Education Program in Physical Education, Thaksin University, Thailand

<sup>2</sup> Lecturer at Department of Health and Physical Education, Faculty of Education, Thaksin University, Thailand

Correspondence: Somchai Thammathes. E-mail: sathammathes@gmail.com

## Abstract

This research aimed to develop and compare the effects of a combined training program on the agility of football players. The sample group was male football players from the National Sports University, Yala Campus, obtained from the purposive sampling of 30 people, divided into an experimental group of 15 people trained through a combined training program created by the researcher. At the same time, 15 football players of the control group were trained by a regular agility training program for eight weeks, three days per week, and 1 hour and 5 minutes per day. The SEMO agility test was used to measure agility. All data were analyzed by averaging and calculating standard deviation. The Wilcoxon signed ranks test was used to compare the results of agility training within the control and experimental groups' pretest and posttest. The Mann-Whitney U test was used to compare the pretest and posttest between the control and experimental groups. The research found that the combined training program created by the researcher was suitable. It was also found that the experimental group had better agility than the control group at the significant level .05. Both within the experimental and the control group, it was found that the agility posttest was better than the pretest at the significant level .05. The study results will serve as guidelines for enhanced players, coaches, and those who interested the football in the future.

**Keywords:** Combined Training Program, Agility, Wilcoxon Signed Ranks Test, Mann-Whitney U test

## 1. Introduction

Nowadays, football is a popular sport played around the world. Football plays a role in daily life through various types of movement and equipment. Football in Thailand has competitions at the national level, region, province, sub-district, educational institutions, agencies, and others. Consistent with Kongwongsa (2019) and Poolsawat (2005), football is a sport that is more popular worldwide than any other sport and has many people following the competition. Because football is a sport played for health and entertainment, it also develops the economy and society. In terms of competing for a championship, football players must be skilled in dribbling, kicking, passing, and shooting. These skills are important basic skills of football. Football players must receive regular training in the correct training methods to allow the athletes to compete effectively. In sports competitions, elements of physical fitness are important, such as balance, muscle strength, endurance, speed, flexibility, and agility. For

accomplished football players, agility is one of the essential physical abilities used in competition because agility is the ability to change position or direction of body movement with speed and efficiency. Due to the ability to contract various muscles to work together well. The methods that will help strengthen the body to be more agile include activities that make the muscles in different body parts work together and coordinate in changing the position and direction of the body's movement (Phuthai, 2020). This is consistent with Chanchuay (2007), who stated that agility is the basis of physical fitness, is important for daily life, and is an essential part of playing many sports, for example, football, volleyball, basketball, table tennis, etc.

Agility is crucial for football players because dribbling and dodging opponents require physical fitness (Krabounrat, 2002). Therefore, coaches need to know the principles of developing agility. Enhancing physical fitness in football athletes has a variety of methods depending on the purpose of the training.

The researcher took on the role of assistant football coach at the National Sports University, Yala Campus, Thailand, which found that the results of the physical fitness test regarding agility of football athletes had a low average, which affects the efficiency of playing, such as movement evasion of opponents or slow dribbling, causing the results of the competition not to be as planned. Moreover, the coach's lack of a systematic and effective agility training program makes athletes less agile.

According to these problems, the researcher is conscious of the importance of physical fitness in terms of agility in the football players of the National Sports University, Yala Campus, which should have a training principle that involves moving and changing directions, which is consistent with Phonchiwin (2015) stated that should be practiced agility training for football players both with a ball and without a ball through applying the principles of sports science to training so that athletes can play football more effectively.

The researcher, as an assistant coach for the football team at the National Sports University, Yala Campus, is interested in studying the effects of training with a combined training program because it is training that has a variety of movement patterns and various directions for use in the competition of football team athletes National Sports University, Yala Campus.

### *1.1 Research objectives*

1. To develop a combined training program on the agility of football players.
2. To compare the agility within a traditional agility program group and a group of football players who practiced a combined training program created by the researcher before and after training.
3. To compare the agility after training between a traditional agility program group and a group of football players who practiced a combined training program created by the researcher before and after training.

## **2. Research methods**

This research is an experimental research. The researcher conducted the experiment according to the research design Pretest Posttest Control Group Design (Gall, Borg and Gall. 1996). The sample group used in this research included male football players from the National Sports University, Yala campus; a total of 30 people were obtained from purposive sampling. The sample in research has to train eight weeks, three days per week, 1 hour and 5 minutes per day, training on Monday, Wednesday, and Friday from 4:30 to 5:35 p.m.

### *2.1 Methods for dividing sample groups*

1. There are 30 male football players from the National Sports University, Yala Campus.
2. Test agility with the SEMO Agility Test (The Sports Science Office, Department of Physical Education. Ministry of Tourism and Sports, 2017) in a total sample group of 30 people.
3. Arrange the agility test results from the lowest to the highest running time of 30 male football players.
4. Then, the matching method divided the sample into two groups of 15 people each (even numbers and odd numbers). This method ensured that the two groups had no different or similar abilities before training.

5. Analyze the data of both groups before the training using statistics Mann Whitney U-Test (Srisa-at, 1995).
6. Randomize the two groups of samples to be the experimental group and the control group by drawing lots. It appears that Group 1 was trained using the traditional agility training program. Meanwhile, the second group trained with a combined training program created by the researchers.

Data analysis, the researcher analyzed the obtained data using a computer program as follows:

1. 1 Statistical analysis to find the mean (Mean) and standard deviation (Standard deviation) of the control group and experimental group
2. 2 Compare the differences in agility training results within the control and experimental groups before and after training using The Wilcoxon Signed–Rank Test statistics.
3. 3 Compare the differences in agility training results between the control and experimental groups before and after training using Mann – Whitney U-test statistics.

### 3. Research results

1. Development of a combined training program that affects the agility of football athletes. It has passed the quality inspection of the training program by 5 experts. It was found that the evaluation of the appropriateness of the combined training program was at 95.00 percent, which was appropriate and usable.

2. Comparison of differences in agility training results within the control group and the experimental group before training and after training for 8 weeks found that the agility of the football players in the experimental group after training was better than before training at statistically significant at the .05 level as shown in Table 1 - Table 2

Table 1: Differences in agility training results within the control group before training and after 8 weeks of training.

Period of training	N	control group			
		Mean	SD.	Z	P
Before training (C <sub>1</sub> )	15	13.907	.397	-3.408	.001*
After training (C <sub>2</sub> )	15	12.557	.663		

\*( $P < .05$ )

Table 2: Differences in agility training results within the experimental group before and after 8 weeks of training.

Period of training	N	experimental group			
		Mean	SD.	Z	P
Before training (E <sub>1</sub> )	15	13.914	.421	-3.408	.001*
After training (E <sub>2</sub> )	15	12.095	.293		

\*( $P < .05$ )

3. Comparing the differences in the results of agility training between the control group and the experimental group before and after training, the two groups found that the agility of football players after training between the experimental and control groups was better than before training at statistically significant at the .05 level as shown in Table 3.

Table 3: shows the agility test results of football athletes before training and after 8 weeks of training.

Group	N	The result of test							
		Before training				After training			
		Mean	SD.	Z	P	Mean	SD.	Z	P
Control group (C)	15	13.907	.397	.000	1.000	12.557	.663	-2.13	.033*
Experimental group (E)	15	13.914	.421			12.095	.293		

\*( $P < .05$ )

#### 4. Discuss the results

Research results on the effects of a combined training program on the agility of football players. There are issues brought up for discussion according to the research objectives as follows:

1. The first research objective is to develop a combined training program that affects the agility of football players. The researcher led the combined training program with five experts to check the quality of the tools and made improvements according to recommendations from the experts. The suitability of the training program was 95 percent. After that, the combined training program created by the researcher was pilot-tested with a group studying football. In order to be more appropriate and efficient before putting it into practice with the sample group.

2. From the second research objective, compare the agility of football players within the control group and the experimental group before and after training. The research results found that after eight weeks of training, both groups of football players had significantly better mean agility than before training at the .05 level. This research shows that athletes who train in combinations follow the principles and training program. Moreover, the movement changes the direction of the feet faster, controlling the body's posture to be balanced. Therefore, these are combinations of training that improve football athletes' agility. Consistent with Kamutsri (2017) stated that practicing agility is necessary to have basic physical fitness training to connect with agility, especially must-have muscle strength training, power, speed, and the nervous system's response. Moreover, it must be trained in an anaerobic, which is the critical energy for muscles to contract and exert force quickly. These things affect the efficiency of the body's movement when changing direction quickly. Agility can be training many methods; each method allows the athlete to use speed of movement and change of direction. In training, the coach must set clear targets according to the needs of development and suit the readiness of the athletes' physical fitness at that time and must be consistent with the training plan that has been set because training to develop agility requires the body to contract muscles with speed or with a lot of force. Therefore, there is an easy chance of injury. For training to be effective, the body must be in a state without fatigue and have warmed up well. Moreover, agility training emphasis should be placed on footwork. The intensity, set, and duration of training must be determined per the need for use in various sports. Focus on distances of 5 - 10 meters and then change direction by setting goals for 3 - 5 sets; for each training set, the athletes must control their bodies to have balance. Set the direction of movement forward, sideways, and backward to be as consistent with each sport as possible. According to Damtae (2011), agility training must involve physiological principles in order to make the body more agile which consists of the muscular system, coordination system in muscle work, and nervous system including energy systems. These systems must work together well. Consistent with the research results of Insuwanno (2017), studied and compared the effects of using a combined training program on the agility of female volleyball players. This study found that training with a combined training program can significantly improve agility at the .01 level.

However, in the control group, although not trained according to the appropriate principles, after eight weeks of traditional training, the agility test results of the football players were on average better than before. It shows that when the body receives movement and regular agility training over eight weeks, it can develop agility as well, in line with Thani (2020), who stated that movement in the body can also improve physical fitness and sports skills.

3. The third research objective compares the agility of football players after training between the control and experimental groups. The study found that football players who trained with the combined training program had



better agility averages than those who trained with the traditional program. Because the researcher carried out the combined training program created through the correct principles, there was continuous training for eight weeks, three days per week, which resulted in improved agility, consistent with Chanapal's (2007) results of the training with an agility training program that affects the dribbling ability of football players aged 12-14 years. It was found that after the 4 and 8 training weeks, the experimental group had better dribbling ability than the control group. Moreover, the combined training program can improve athletes' agility performance by using maximum effort training and resting during sets, allowing the body to recover quickly. Consistent with the concept of Pholek (2018) studied specific movement training that affects agility in young male basketball players. It was found that the experimental group had an average agility better than the control group after six weeks of training at the 0.5 level. From the research results, it can be concluded that the effects of combined training programs on the agility of football players are very important to athletes. It can be seen that the 4 combined training programs that the researcher has created have studied the principles of training and the appropriateness of the duration of the training. As a result, the agility of the football players in the experimental group improved, requiring less time to move and change directions. Because agility will occur and it takes time to practice movement, change of direction, and control of the muscular and cognitive nervous system quickly and agile, response balance control must be effective. This is because almost all sports involve movement and some require rapid changes in direction. If the body has agility and good mechanics, it will help to play or compete in sports successfully.

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# Assessing the Implementation of the MBHTE-BARMM Science Learning Modules: Exploring Issues, Challenges, and Suggestions for Policy Development

Norsaima U. Umpara<sup>1</sup>, Wardah D. Guimba<sup>2</sup>, Minerva-Saminah M. Naga<sup>3</sup>, Lotis B. Daguisonan<sup>4</sup>

<sup>1,2,3,4</sup>Department of Graduate Education, College of Education, Mindanao State University-Main Campus, Marawi City, Lanao del Sur, Philippines

Correspondence: Wardah D. Guimba. Email: wardah.guimba@msumain.edu.ph

## Abstract

This study investigated the implementation of Ministry of Basic, Higher, and Technical Education-Bangsamoro Autonomous Region in Muslim Mindanao (MBHTE-BARMM) learning resources by exploring their issues and challenges as well as providing suggestions for policy development. This study utilized a qualitative approach through one-on-one in-depth interview with twenty-five (25) elementary science teachers from various school divisions in the BARMM region who are using the science learning modules. Thematic analysis revealed issues and challenges concerning accessibility, availability, and utilization. Findings highlighted the need for a comprehensive approach focusing on module completeness, content complexity, and essential topics, alongside infrastructure improvement, streamlined procedures, content adaptation, and community engagement. Strengths and weaknesses were identified, emphasizing cultural relevance, alignment with the central curriculum, effective module structure, and cognitive level of the module and its target users. Based on these findings, a six-key-area model for improved implementation is proposed. For policy development, this study can potentially inform policy decisions and educational strategies in the BARMM region, contributing to the ongoing efforts to enhance the quality and relevance of education, ensure equitable access, and address the specific needs of the Bangsamoro people.

**Keywords:** Science Learning Modules, MBHTE-BARMM, Learning Module Implementation, Qualitative Study

## 1. Introduction

Elementary education lays the groundwork for academic success throughout a learner's life and with teachers serving as key agents in combating illiteracy and fostering competent and skillful learners. To aid the teachers to successfully mold the foundational education of the learners, various learning resources and materials are utilized as they serve as aid in teaching. The use of learning resources is most especially crucial in the early childhood to primary or elementary education. The importance of educational resources in the classroom cannot be overstated.

One of the most important factors in education of which helps learners to learn faster and better are learning resources or instructional materials. Education is a survival tool used by human beings to improve the quality of their lives and to function effectively in the society. Utilization of learning resources, a vital aspect of the efficient and effective teaching of educators, refers to the art of effective selection, acquisition and use of instructional materials to enhance achievement of the lesson objectives. For this to happen, resources must be made available. The same must be adequate and relevant to the level of learners and the content being taught (Syengo, 2016). This implies that instructional resources as objects or devices, which help the teacher to make a lesson for the learner. Thus, instructional resources are concrete or physical objects which provide sound, visual or both to the sense organs during teaching.

Literature on instructional resources (IR) or learning resources (LR) depicted some aspects of this area of research. Utilization of instructional resources was effective, and it influenced pupils' learning which leads to high academic performance. Several studies have shown a number of factors that tend to influence the selection of instructional resources. These factors are teacher motivation, the capacity to procure funds to buy instructional resources, the capacity to mobilize resources for the purchase of instructional resources, the capacity of head teachers' knowledge about the instructional material, positive attitude towards the instructional resources, teachers' academic qualification; male teachers who were found to use instructional resources more often than their female counterparts. Additionally, demographic profile tends to also influence the selection of IR, this profile includes age and gender behavior of a pre-school learner, the number of children admitted and the sex, socio economic background, safety, learners' ability (special/ normal learners) and language level. Also included are class size and physical infrastructure (Ayiema, 2018).

Clearly, it appears that teacher qualification, attitude, and gender are some factors that impacted the selection of resources. On the other hand, Akasi and Nwabufu (2016) showed that instructional resources can also contribute to learning even in higher education, for instance is the case of business education courses as focus of their study. However, in terms of acquisition of self-employment skills among business education, instructional materials showed to have no significant influence on the learners. In a comprehensive literature review of Sirajo and Abdullahi (2023) as to the influence of the availability of instructional resources on learning mathematics in north-western Nigeria, it was shown overall that the learners' capacity to learn mathematics is dependent on the availability of instructional materials because it motivated them and aroused their interest.

Furthermore, previous studies also disclosed the lack of learning resources, especially in teaching science subjects in secondary schools. Specifically, some resources or materials were available, but some were not available, or were not adequate in the basic education schools and early childhood education and that despite the training that teachers received for the instructional resources, teachers still have average competence (Mukagihana et al., 2020). Unfortunately, the scarcity of available learning resources tends to result into some teachers (e.g., Science teachers) to neglect the use of relevant teaching aids when teaching under the pretense that they are not available, inadequate, or costly to improvise. Lastly, as to the challenges encountered in the utilization of instructional resources, it was revealed that attitude towards the use of instructional resources, instructional methods used, availability and use of instructional materials were some of these challenges (Pius & Martin, 2019).

As a response to issues with learning resources, the Ministry of Basic, Higher and Technical Education (MBHTE) which serves as the education ministry for the Bangsamoro Autonomous Region of Muslim Mindanao (BARMM) and is committed to ensuring quality, accessible, and inclusive education for all Bangsamoro residents, released learning resources to be used by teachers in the different divisions of the region. These resources include textbooks, workbooks, and instructional materials which are specifically designed to support students' educational needs within the context of BARMM region.

While it is a good indication that the ministry made the efforts to help the teachers and the learners, it is equally important to assess and examine the status of implementation of these learning resources. A crucial aspect of achieving this goal is the effective implementation of MBHTE-BARMM. However, the successful implementation of these learning resources is not devoid of challenges. Issues such as resource availability, accessibility, and

utilization need to be thoroughly examined and addressed to optimize the impact of these resources on the educational landscape of BARMM.

These previous researches that was conducted relevant to learning modules showed that most of these studies were conducted in Kenya. Few studies were found to have done in the Philippines, especially in the region of BARMM. Moreover, there are few studies that explored the issues and challenges with the utilization of Science learning modules. The 2023 educational challenges reported by the DepEd can be a good start to gain insights and dig deeper on this challenge in order to address the problems, make necessary solutions for policy guidelines. Hence, this study aimed to address the gap in research concerning the implementation of the MBHTE-BARMM Science learning modules by pursuing the following objectives: 1) To assess the current state of implementation in terms of accessibility, availability, and utilization of the modules; 2) To identify the issues and challenges encountered by teacher-users regarding technical aspects, pedagogical approaches, and organizational structures; 3) To collect suggestions and feedback from teacher-users on how to improve the implementation of the modules; and 4) To develop a model based on the research findings that can effectively enhance the implementation of the MBHTE-BARMM Science learning modules.

## 2. Method

This study employed a qualitative approach to gain a nuanced understanding through in-depth exploration and explanation of empirical data gathered from participants through semi-structured interview. This choice of a qualitative approach, unlike previous quantitative designs, aims to capture firsthand experiences, allowing a comprehensive exploration of participants' perspectives, challenges, and feedback related to the region's learning resources.

This study was conducted in Cotabato, Lanao del Sur, Maguindanao, and Marawi under the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM), Philippines. These four areas were only the included locale of the study due to several reasons. First, safety concerns within the broader BARMM region set the foundation of the researchers' decision. This includes specific incidents, reports, or challenges that pose risks to the research team during data gathering. Second, detailing the researchers' efforts to communicate with BARMM authorities demonstrates due diligence, their response indicates an inability to guarantee safety, it provides a clear context for the decision to limit the research scope. And third, challenges faced in online interviews outside specific areas add transparency. Limitations in linkages and networks establishes the practical difficulties encountered in reaching potential participants in the different areas of BARMM aside for these said chosen four areas. In connection with, overall limitations and challenges faced by BARMM residents in terms of accessing a reliable and stable internet connection that might impact the quality of online interviews such as dropped connections, poor audio or video quality, and the overall disruption of the interview process.

The participants of this study included 25 Science teachers who were using the Science modules of MBHTE-BARMM. The study used purposive sampling method in determining the participants. According to Khan (2020), researchers use purposive sampling when they believe that certain participants can provide valuable insights or unique perspectives related to the research focus. As a criterion in purposively selecting these participants, the participants should be teachers who teach science subjects and are using the science module developed by the MBHTE – BARMM. In addition to these criteria, another consideration was the availability and readiness of the teachers to participate in the study. By considering these factors, the research aims to ensure that the chosen participants are willing and able to contribute effectively to the study.

The study made use of the thematic analysis that refers to interpreting the processes of selecting codes and constructing of themes in the transcripts of interviews. The researchers analyzed the data for recurring subjects, ideas, and meaning patterns as well as other prevalent themes. Thematic analysis procedures provide a systematic strategy for viewing and processing qualitative input through coding. This approach involves far more than simply summarizing the relevant aspects of the researchers' extensive collected data (Nowell et al., 2017).

### 3. Results and Discussion

This section is organized based on the identified codes and themes, providing a comprehensive understanding of the participants' responses and answers to the statement of the problem that this study aims to address.

#### 3.1. State of Implementation of the MBHTE-BARMM Learning Modules

##### 3.1.1. Availability and Access Mechanisms of MBHTE-BARMM Learning Modules

Participants consistently mention downloading the MBHTE-BARMM Learning Modules via the internet as the primary mode of access. Almost all of participants emphasize Internet Downloads (ID) as the primary mode of accessing MBHTE-BARMM Learning Modules. Below is the common response of these mentioned participants:

*“Yes, through downloading it via internet” (P2)*

This entails that downloading it online is more convenient for the teachers and accessible, not to mention that teachers do not really have a choice but to access it digitally, because as what P16 stated, no hardcopy of the modules was given to them. This points to a pattern of digital access dominance among teachers in the region. However, some participants pointed out a problem of downloading the module if you have poor internet connect, as mentioned by P16 and P18. The widespread reliance on digital means suggests a need for robust online infrastructure and support to ensure seamless access to learning materials for all educators.

The fact that the MBHTE – BARMM required the teachers to access the learning module through downloading it online implies a strong reliance on digital technology and ease of access for the teachers. This is more convenient and more economical for the organization, nevertheless, it poses a problem for the teachers. It highlights the importance of ensuring reliable internet access for teachers or the schools division, as well as availability of printers to produce or reproduce such materials. Hence, the ministry of education should also ensure that support for the production of materials is readily available. Moreover, this digital access dominance aligns with the contemporary trend of utilizing technology for educational resources, especially now in the 21st century.

This suggests a hybrid access strategy combining digital and physical means. Understanding hybrid access approaches emphasizes the importance of accommodating diverse preferences and ensuring inclusivity by providing multiple avenues for educators to access learning resources. The mention of learning modules being available through both photocopy and internet sources suggests a hybrid approach to access. This flexibility caters to different preferences and situations, acknowledging the diversity in educators' access needs. The availability of learning modules through both photocopy and internet sources, presents a hybrid access approach. This flexibility caters to diverse preferences, acknowledging the varied needs of educators in accessing learning materials. This is practically most needed and fit the context of BARMM wherein not all teachers or students have access to strong internet connections, nor do they have the financial means to print copies of modules (Anderson & Johnson (2018).

The findings highlight the critical role of digital access in contemporary education. While internet downloads dominate, the resourceful adaptation to alternative methods and the challenges associated with technology dependence call for a comprehensive approach to ensure equitable access to Science learning modules in the BARMM. The synthesis of these findings has profound implications for practice, suggesting strategic interventions to enhance access to MBHTE-BARMM Science Learning Modules. These implications include improving digital infrastructure, enhancing distribution strategies, promoting flexibility in access, and capacity building for educators.

##### 3.1.2. Completeness of MBHTE-BARMM Learning Modules: Availability

Participants consistently express positive feedback on module availability, almost all of participants consistently emphasize Positive Feedback on Module Availability. Below is the common response from these mentioned participants:

*“Yes, available” (P4)*

Participants consistently mention that the MBHTE-BARMM Learning Modules are available. This overarching theme reflects the overall positive response regarding the availability of the modules. Overall, there is positive feedback on the availability of MBHTE- BARMM Learning Modules. This provides a foundation for the effectiveness of the curriculum in reaching out to teachers. Positive feedback on module availability is foundational for the effectiveness of the curriculum in reaching teachers and facilitating learning.

According to the study of Bugler et al., (2017), teachers indicated that they crave materials that better serve the range of students in their classrooms and that enliven learning. Indeed, teachers in more than one of the focus groups described themselves as materials “hunter-gatherers.” Teachers spent looking for resources that they need in order to support their students’ learning. Teachers resisted quantifying precisely how much time they spent searching for resources; typical responses to this question included “too much” and “you don’t really want to know.” Cajayon & Benavides (2022) pointed out that the lack of suitable instructional materials and other devices that the teacher can use in teaching all over the country resulted in poor performance of the students in the National Achievement Test. This failure is also connected to the fact that instructional materials that are aligned with the target competencies are scarce.

### 3.1.3. Evaluating Accessibility of MBHTE-BARMM Learning Modules

Almost all of participants consistently emphasize Accessibility with High Internet Connection as the primary mode of accessing MBHTE- BARMM Learning Modules. Below is the common response from these mentioned participants:

*“It is very accessible for those who have high internet connection” (P2).*

The findings indicate a unanimous agreement among participants, indicating a shared consensus on the high accessibility of the internet. This collective agreement points towards a strong correlation between internet connectivity and the accessibility of learning modules. The participants seem to confirm that a reliable and robust internet connection is a crucial factor influencing how easily they can access educational materials. High-speed internet plays a critical role in ensuring accessibility to learning resources. The emphasis on high-speed internet underlines the importance of a fast and stable connection for effective engagement with educational content.

This external reference aligns with the participants' collective viewpoint, providing additional support to the notion that internet accessibility is pivotal in the context of accessing learning modules. The consensus among participants regarding high internet accessibility serves as further validation of Smith and Brown's emphasis on the critical role of high-speed internet. This alignment in perspectives emphasizes the interconnected nature of internet connectivity and the effective utilization of learning resources. Promoting internet accessibility ensures advocating for improved internet infrastructure to enhance accessibility for all educators, minimizing dependency on specific individual (Brown et al., 2022).

### 3.1.4. Exploring Access Methods for MBHTE-BARMM Learning Modules

Nearly all participants have consistently emphasized that the modules can be accessed via internet through downloading, added to that is their mentioned of the tendency for teachers to save a soft copy. Below is the common response from these mentioned participants:

*“It can be accessed via internet through downloading it and save a soft copy of it” (P2)*

The uniform emphasis on digital access highlights the consistency in participants' understanding of accessing modules via the internet, reflecting a technological standardization. The foundational role of standardized digital access, emphasizing that a consistent understanding is vital for promoting technological literacy among educators. This highlighted the importance of digital accessibility for educational materials, emphasizing that a standardized approach, as seen in the uniform understanding, contributes to effective learning outcomes. Strengthening digital literacy means promoting digital literacy among educators to ensure a standardized understanding of accessing modules through the internet. In their research on digital literacy in education, the need for continuous professional

development to enhance educators' digital literacy skills and ensure effective utilization of online resources (Brown et al., 2022).

### 3.1.5. Exploring Access Methods for MBHTE-BARMM Learning Modules

The majority encountered by the participants is the low internet connection, which makes the learning module inaccessible. Participants consistently mention High Internet Connection Requirement as a challenge in accessing MBHTE-BARMM learning module, almost all of participants namely consistently emphasize High Internet Requirement.

*“It is not very accessible for those who have low internet connection (P2)”*

Most participants highlighted the issue on low internet connection, a situation where the participants have a slow or unreliable internet connection. In the context of BARMM, a province in the southern part of Mindanao, internet connectivity is often problematic due to lack of available infrastructure to boost its internet. The low internet connection could be due to various reasons such as a weak Wi-Fi signal, limited bandwidth, or other technical issues related to internet connectivity. The main consequence of the low internet connection is that it makes the learning module inaccessible. Participant 2 specifically pointed out that the modules are not very accessible for those with low internet connections. This means that even though the learning modules are supposed to be available online, participants with poor internet connections are facing challenges in accessing and utilizing these resources effectively.

In essence, the finding highlights a technological barrier (low internet connection) in the context of BARMM that is hindering the teachers from fully engaging and accessing the learning modules. This entails the need for officials in the MBHTE – BARMM to address internet connectivity issue to ensure equal access and participation for all education stakeholders, regardless of their internet connectivity constraints. Potential solutions might include optimizing the modules for slower internet speeds, providing alternative offline materials, or improving overall internet infrastructure for the participants. Challenges with low internet accessibility, fluctuating signals, and extra expenses for teachers in remote areas highlight disparities in internet access, affecting module accessibility. In their study on internet accessibility, this highlights that challenges with low internet accessibility and fluctuating signals contribute to inequities in accessing online modules, especially in remote areas. Improving internet accessibility. This refers to addressing internet accessibility challenges, especially in remote areas, by exploring alternative connectivity solutions and reducing extra expenses for teachers (Brown et al., 2022).

### 3.1.6. Frequency of Integration: Utilizing MBHTE-BARMM Learning Modules in Teaching

Participants consistently mention Continuous and Encouraged Usage in utilizing the MBHTE-BARMM Learning Modules, almost all of participants consistently emphasize Continuous and Encouraged Usage.

*“I constantly use it since, even now, it is still highly recommended to be taken (P2)”*

*“...we always use it because it is really required to use especially during pandemic even up to now it is still advisable to be used (P5)”*

Continuous and highly encouraged usage is consistently highlighted across participants, underscoring the ongoing relevance of MBHTE-BARMM Learning Modules. The importance of continuous usage of educational materials to foster a consistent learning environment. Johnson and Williams (2018) argue that ongoing encouragement for utilization aligns with effective teaching practices, ensuring that educators capitalize on valuable resources. Continuous relevance means continuous and highly encouraged usage of resources indicates the sustained relevance of MBHTE-BARMM Learning Modules in the teaching practices of the teachers.

### 3.1.7. Evaluating Efficacy of MBHTE-BARMM Learning Modules in Attaining Learning Objectives

Participants consistently mention that these Science learning modules are helpful in achieving the learning objectives, almost all of them consistently emphasize Positive Affirmation.

*“Yes, it helps (P1-P8)”*



*“Yes, using the module really helped (P21)”*

*“Yes, Maam but they are limited resources (P22)”*

Instructional Materials such as learning modules are important elements to achieving effective delivery of instruction and achieving learning objectives. According to the study of Olipas (2023), instructional materials are both print and non-print materials used to convey knowledge to learners during the learning process. Prints, textbooks, periodicals, newspapers, slides, photographs, workbooks, and electronic media are examples of instructional resources. Instructional materials are devices or objects employed by teachers to facilitate the teaching- and-learning process. As expressed by Abubakar (2020), instructional materials contribute to the improvement of the academic performance of learners. Thus, instructional materials are essential elements in the delivery of quality instruction and the achievement of learning objectives.

In today’s generation, quality education is continuously improved and developed through the different efforts and activities of learning institutions for the benefit of learners. The use of instructional materials is intended to increase the quality of education for students to achieve better academic results. Through instructional materials like learning modules that serve as learning resource, learning abstract concepts is facilitated by concretizing ideas and stimulating the minds of the learners. Properly designed instructional materials also contribute to the increase in engagement and motivation among the learners. Also, selecting, designing, and/or using appropriate IMs are advantageous and useful in the teaching-and-learning process for both the learners and the teachers (Ajoke, 2017). Thus, IMs improve the learning process.

### 3.1.8. Assessing the Strengths and Weaknesses of MBHTE-BARMM Learning Modules

Participants consistently mention structural strength vs. comprehension hurdles when they were asked about the strengths and weaknesses of the MBHTE-BARMM Learning Modules, almost all of participants consistently emphasize structural strength vs. Comprehension Hurdles.

The advantages and benefits of using Science learning modules enabling teachers to teach conveniently and learners to acquire knowledge and develop new skills due to its best structural features. It helps in encouraging learners to increase pay higher levels of attention and enhance the student's interest if its structures are vivid and show the blueprint of the lesson directly just like what is in the Activity 3 portion of the MBHTE-BARMM learning modules. that shows the brief background of the lesson with the key concepts.

The utilization of instructional materials improves students' memory, facilitates the teaching-learning process, and increases their accumulation rate. It also assists teachers in correcting misconceptions among students, providing personal lessons, encouraging teacher innovation, and allowing students and teachers to learn activities that promote the concept of self-evaluation in tangible terms. Instructional materials also influence the attainment of student learning outcomes in schools (Muraina, 2015). Thus, the integration of appropriate instructional materials into different courses is necessary for the effective learning process.

## 3.2. State of Implementation of the MBHTE-BARMM Learning Modules

### 3.2.1. Exploring Technical Challenges in Utilizing MBHTE-BARMM Learning Modules: Identification and Analysis of Specific Issues

Participants consistently reported typographical errors as a technical issue encountered in the implementation of the MBHTE-BARMM learning modules as perceived by the teacher- user participants, almost all of them consistently emphasize typographical errors.

*“Yes, typo errors only (P1)”*

*“I think there are less technical issues on it because mostly are typo errors only. (P4)”*

*“Yes, what I possibly observe are misspelled words but due to typo errors only of course no one is perfect (she smiles) (P5)”*

The consistent mention of typographical errors indicates a prevalent issue in the accuracy of written content within the modules. This issue may affect the clarity and understanding of the learning materials. According to Davis and Smith (2018), the presence of typographical errors in educational materials can significantly impact the accuracy and clarity of content. Addressing this issue is crucial for ensuring the reliability and effectiveness of the learning modules. In a nutshell, the technical challenges encountered by the teachers that are found in the learning module they use, from MBHTE – BARMM poses various implications. The typographical errors reported by participants highlight a need for thorough proofreading and editing of the learning modules before distribution. Addressing this issue is crucial for ensuring the accuracy and reliability of the content.

The consistent identification of typographical errors within the learning modules underscores a pervasive challenge in maintaining the accuracy of written content. This issue has the potential to compromise the clarity and overall comprehension of the educational materials, posing significant concerns for effective learning. As asserted by Davis and Smith (2018), the presence of typographical errors in educational materials can have far-reaching consequences, adversely affecting both the accuracy and clarity of the content, there will be a need of refined accuracy with its presence. The impact of typographical errors extends beyond mere technicalities; it influences the reliability and effectiveness of the learning modules. The reported technical challenges faced by teachers utilizing modules from MBHTE – BARMM reveal various implications for the educational landscape. The presence of typographical errors, as highlighted by participants, underscores a critical need for meticulous proofreading and editing of learning modules before their distribution. In essence, the recognition of typographical errors as a recurrent issue serves as a call to action for comprehensive quality assurance processes in content creation.

By addressing these technical challenges, particularly through rigorous proofreading and editing, educational institutions can ensure the accuracy, reliability, and overall efficacy of learning materials. This commitment is pivotal for upholding the integrity of the educational content and, by extension, fostering an optimal learning environment for both teachers and students. With this, refined accuracy is essential for upholding the integrity of information, enhancing communication effectiveness, and building trust among the audience or users. It reflects a commitment to delivering high-quality and reliable content by addressing any shortcomings or inaccuracies that may compromise the overall clarity and credibility of the material. In various contexts, refining accuracy may involve thorough proofreading, fact-checking, and quality control measures to ensure that the information presented is free from errors and aligns with established standards. This can be relevant in academic writing, research, content creation, or any situation where the precision and correctness of information are critical. Refine accuracy refers to the process of improving and enhancing the precision, correctness, and reliability of information, data, or content. When you refine accuracy, you are actively taking steps to eliminate errors, inconsistencies, or inaccuracies in order to produce a more reliable and trustworthy outcome.

### 3.2.2. Examining Pedagogical Challenges in Utilizing MBHTE-BARMM Learning Modules: Identification and Analysis of Specific Issues

Participants consistently mention Cognitive Load and Questioning Complexity as a pedagogical challenge encountered in the implementation of the MBHTE-BARMM Science learning modules as perceived by the teacher-user participants, almost all of them consistently emphasize Cognitive Load and Questioning Complexity.

*“Problem exists with the high level of questions and information found in the learning modules (P1)”*

*“Even if the child is smart and have an idea of what an earthquake is, but they made two topics into one topic (P2)”*

Participants identify a problem with the high level of questions and information in modules, impacting learners' ability to express themselves effectively. As can be seen from the sample interview transcripts, expressed concerns about the high level of questions and the integration of complex topics in the learning modules, impacting learners' ability to comprehend and respond effectively. For instance, P1 mentioned that the in the science learning modules, there are parts where students are required to express themselves to answer the questions. However, she stated that the task is quite challenging for the learners who have no capacity yet to express themselves, especially after the learning gaps they experience as a result of the pandemic. On the other hand, P2 said that some topics were

appeared to have shortcut and that there are some aspects to the topic that were not expanded or discussed in the module, such as the discussions on earthquake.

The finding implies an issue on cognitive load, thus, there is a need for learning module to be contextualized and individualized to the target learners, and the kind of learners who will use it. As argued by Smith et al. (2019), that personalized learning paths, achieved through differentiated activities, are essential for addressing the diverse needs of students, fostering engagement, and achievement. The identified challenges related to the cognitive load and questioning complexity highlight potential barriers to effective learning. Simplifying questions and ensuring topics are appropriately segmented could enhance learner understanding. Cognitive load theory suggests that excessive cognitive demands, such as those posed by complex questions, can hinder learning. Simplifying questions and breaking down complex topics align with strategies to manage cognitive load and enhance comprehension (Sweller et al., 2020).

### 3.2.3. Exploring Organizational Issues in Utilizing MBHTE-BARMM Learning Modules: Identification and Analysis of Specific Issues

Participants consistently mention Limited Sharing Resources as an organizational challenge encountered in the implementation of the MBHTE-BARMM Science learning modules as perceived by the teacher-user participants, almost all of them consistently emphasize Limited Sharing Resources.

*“Yes, not all teachers who have figured out how to download and obtain a copy of the learning modules are willing to share the soft copy of those modules with others (P4)”*

Majority of the participants shed light on a different organizational challenge related to interpersonal dynamics among teachers. The participant expressed concerns about a lack of willingness among some teachers to share knowledge. There seems to be a reluctance to freely exchange information, potentially hindering the collaborative learning environment. Moreover, the participant shares a personal struggle tied to communication issues, particularly as someone not originally from the local community. This dual challenge of information sharing reluctance and communication barriers poses hurdles to effective collaboration and professional development among teachers.

Moreover, the statements from participants in the interview transcripts highlight a common challenge related to knowledge-sharing and collaboration among teachers. According to P4, not all teachers who have successfully figured out how to download and obtain learning modules are willing to share the soft copy of those modules with their colleagues. This reluctance to share valuable resources creates a barrier to collaborative learning and can potentially hinder the overall effectiveness of the teaching community.

The findings shed light on the need for fostering a more open and collaborative culture among teachers in MBHTE - BARMM. Overcoming the hesitancy to share learning resources is essential for creating an environment where educators can benefit from each other's expertise and contribute collectively to the improvement of teaching practices. This calls for initiatives that encourage knowledge-sharing, collaboration, and the development of a supportive community within the educational institution. Addressing these cultural aspects can contribute to a more harmonious and effective teaching environment, ultimately benefiting both teachers and students in their educational journey.

This entails that the reliance on self-initiative for resource access indicates that teachers take individual responsibility for obtaining learning materials. Encouraging proactive approaches and providing necessary tools can empower teachers in resource acquisition. Reluctance among teachers to share resources highlights potential barriers in collaboration. Fostering a culture of generosity and resource-sharing is essential for a supportive teaching community. Collaborative efforts and networks play a crucial role in accessing modules. Establishing clear communication channels and networks within the teaching community can enhance resource-sharing practices (Burt, 2010).

According to Cobcroft et al., (2006), the reliance on self-initiative for resource access emphasizes individual efforts among teachers. Encouraging proactive approaches to obtain learning materials could contribute to a more

empowered teaching community. Meanwhile, the reliance on networks and collaborative efforts to access modules indicates the importance of a supportive teaching community. Establishing clear communication channels and networks can facilitate resource sharing. Collaborative efforts and networks play a crucial role in accessing modules. Establishing clear communication channels and networks can facilitate resource-sharing practices.

### *3.3. The Suggestions given by the Teacher-Users to Improve the Implementation of the MBHTE-BARMM Learning Modules*

#### **3.3.1. Enhancing Availability and Accessibility: Stakeholder Suggestions for Improving MBHTE-BARMM Learning Modules in Schools**

Many participants collectively suggested that there should be available module for offline accessibility. This emphasizes the need for Science learning modules to be accessible without an internet connection. This also underscores concerns about exclusive online availability and the importance of accommodating various access scenarios. It can be recalled in the previous sections that the respondents mentioned that some of them do not have strong internet connection to permit them to access or download the learning modules. Advocacy for offline accessibility of learning resource materials is a crucial initiative that focuses on ensuring that educational content can be accessed without requiring a continuous internet connection. This is particularly relevant in regions or situations where internet access is limited or unreliable. Together, these stakeholders can work towards implementing solutions that enhance offline accessibility. Thus, advocating for offline accessibility in learning resource materials is a proactive approach to address challenges associated with limited or unreliable internet access. It is a crucial step towards making education more inclusive, equitable, and resilient in diverse global contexts. The concept of an "offline access drive" has become increasingly significant, reflecting a proactive response to the challenges posed by limited or unreliable internet connectivity, particularly in underserved regions.

According to Smith (2021), the need for offline access to digital resources, such as educational materials and digital libraries, has gained prominence due to the recognition that not everyone has consistent internet access. This is particularly crucial in remote areas where individuals may face obstacles in connecting to the online world regularly. In the implementation of offline access drives, organizations and institutions strategize the distribution of offline versions of digital resources through tangible mediums like USB drives, DVDs, or other storage devices. The objective is clear: to empower individuals in areas with restricted internet connectivity to access educational modules, e-books, or videos even without a continuous internet connection. The offline access drive aligns with the broader goal of fostering inclusivity in education by bridging the digital gap that might impede learning opportunities for those in remote or marginalized communities. In essence, the offline access drive emerges as a practical and impactful solution to promote digital inclusivity, acknowledging the diverse needs and challenges faced by individuals in different parts of the world. This further emphasizes that by reducing dependency on continuous internet access, these initiatives contribute significantly to democratizing access to education and information, fostering a more inclusive and equitable global learning landscape.

#### **3.3.2. Enhancing Utilization: Teacher Recommendations for Improving the Use of MBHTE-BARMM Learning Modules in Teaching**

Participants recommended that modules should be simplified based on the level of comprehension of their learners to ensure meaningful utilization, aligning content with cognitive abilities of their children, almost all of them consistently emphasize simplicity for learner comprehension.

Most importantly, the recurring theme of advocating for simplicity in modules emphasizes the importance of clarity and comprehension. Teachers recognize potential challenges in learner understanding and propose strategies to enhance overall comprehension. Overall, the findings reflect a teacher-centric perspective on enhancing the utilization of MBHTE-BARMM Science Learning Modules. These insights provide valuable guidance for educational authorities in developing and refining instructional materials, ensuring that they meet the diverse needs of teachers and students in the region. Additionally, the recommendations underscore the importance of ongoing collaboration between teachers, educational institutions, and policymakers to create a robust and responsive educational ecosystem. Differentiated activities include easy to moderate activities that matches the

cognitive level or abilities of the learners in the BARMM. The call for differentiated activities in the context of MBHTE – BARMM implies a departure from a one-size-fits-all instructional model. Instead, it suggests an approach where writers of modules provide a range of activities within the modules to address the diverse learning styles, strengths, and challenges of Bangsamoro learners. These activities may vary in complexity, format, or focus, allowing students to engage with the content in ways that align with their individual preferences and abilities.

Cognitive simplification is an act of ensuring accessible learning. Ensuring accessible learning refers to a multifaceted concept that revolves around creating an inclusive and equitable educational environment that accommodates the diverse needs and abilities of all learners. The goal is to remove barriers to learning, providing every student with an equal opportunity to participate, engage, and succeed in their educational journey. Ensuring accessible learning is a multifaceted concept essential for fostering an inclusive and equitable educational environment that caters to the diverse needs and abilities of all learners. This comprehensive approach aims to eliminate barriers to learning, ensuring that every student has an equal opportunity to actively participate, engage, and succeed in their educational journey. The commitment to accessibility reflects a dedication to creating a learning environment where the unique strengths and challenges of each student are recognized and accommodated, promoting an educational landscape that values diversity and supports the holistic development of every learner.

Ensuring accessible learning is a multifaceted concept crucial for establishing an inclusive and equitable educational environment that caters to the diverse needs and abilities of all learners (Jones, 2023). This comprehensive approach is centered on the removal of barriers to learning, striving to grant every student an equal opportunity to actively participate, engage, and succeed throughout their educational journey. Embracing accessibility in education signifies a commitment to recognizing and addressing the unique strengths and challenges of each student, cultivating an educational landscape that values diversity and promotes the holistic development of every learner.

### 3.3.3. Strategic Module Preparation: Addressing Challenges, Incorporating Suggestions, and Identifying Key Topics for Comprehensive Inclusion

Participants consistently target Ensuring Accessible Learning as a suggestion on how the Learning Modules should be Prepared, almost all of them consistently emphasize Ensuring Accessible Learning.

Ensuring accessible learning is a critical aspect of building an inclusive and equitable education system. Accessible learning refers to the provision of educational opportunities that are available and tailored to meet the diverse needs of all learners, irrespective of their physical or cognitive abilities. This theme is rooted in the belief that education is a fundamental right and should be accessible to every individual, regardless of their background, abilities, or disabilities. In this comprehensive analysis, we will explore the importance of accessible learning, its benefits, challenges, and potential solutions, with a focus on reinforcing the need for inclusive education. The emphasis on differentiated activities reflects a learner-centric approach, recognizing the diversity of student abilities and the need for personalized learning paths. DU363, P13 emphasizes the need for supplementary activities for students who may struggle with certain module tasks, promoting inclusivity.

Accessible learning ensures that every student has an equal opportunity to access and benefit from education. It promotes a level playing field, allowing individuals with diverse abilities to participate and thrive in the learning environment. The findings reveal a comprehensive set of recommendations and perspectives from participants on module preparation. The overarching themes highlight a commitment to learner-centered, accessible, and contextualized education. The alignment with the MELC framework underscores a dedication to adhering to curriculum guidelines, ensuring that modules address essential competencies outlined by DepEd. Thus, the synthesized insights and recommendations from participants contribute to a holistic understanding of how modules should be prepared, taking into account the unique needs, abilities, and challenges of learners. These findings provide valuable guidance for educational authorities and curriculum developers in creating responsive and effective learning materials for the MBHTE-BARMM region. As highlighted by Tomlinson (2001), inclusive education calls for supplementary activities that address individual student needs, ensuring no learner is left behind. The suggestion to incorporate real objects and vivid visuals aims to enhance multisensory engagement,

making the learning experience more enjoyable and impactful, particularly in subjects like science. This is especially crucial for students in remote areas of the BARMM region with limited exposure to technology.

### 3.4. Proposed Model to Improve the Implementation of the MBHTE-BARMM Learning Modules

Based on the results and discussions presented in the study, a model for improving the implementation of MBHTE-BARMM Science learning modules is proposed. This model integrates key themes and recommendations identified throughout the research. As can be seen, the proposed model consists of 6 dimensions or areas where the implementation of the MBHTE – BARMM can be improved. This model addresses the critical areas of improvement that all stakeholders or persons involved in the development of science learning modules in MBHTE – BARMM should take into consideration.

Developed from a thorough analysis of four crucial research questions, the SPECTRA model goes beyond conventional frameworks, introducing six key dimensions to enhance the implementation of MBHTE-BARMM Science learning modules:

- 1) Offline Access Drive: Focused on ensuring modules are accessible offline, this dimension addresses the need for flexibility in resource utilization, catering to diverse learning environments.
- 2) Constant Usage: The SPECTRA model promotes continuous engagement with Science learning modules, emphasizing a sustained and immersive learning experience for teacher-users and students alike.
- 3) Refined Accuracy: Precision in content and delivery is paramount. The Refined Accuracy dimension of SPECTRA ensures that MBHTE-BARMM Science learning modules meet the highest standards of quality and effectiveness.
- 4) Cognitive Simplification: Recognizing the importance of user-friendly content, SPECTRA emphasize the simplification of complex concepts to enhance comprehension, facilitating a more effective teaching and learning process.
- 5) Fostered Knowledge-Sharing: Collaboration is key. SPECTRA encourage a culture of knowledge-sharing among teacher-users, fostering an environment where insights, best practices, and challenges are openly discussed and addressed.
- 6) Ensuring Accessible Learning: The ultimate goal of SPECTRA is to make quality education accessible to all. This dimension focuses on removing barriers to access, ensuring that the benefits of MBHTE-BARMM Science learning modules are extended to every learner.

Visualized in Figure 1, the SPECTRA model serves as a dynamic guide for stakeholders, encapsulating the insights from research questions and offering a strategic, multi-dimensional approach to elevate the educational experience in the BARMM region and beyond.



Figure 1: *SPECTRA Model*  
(*Science Module Excellence Framework for MBHTE-BARMM*)

#### 4. Conclusion

This study provided a thorough examination of various facets of the MBHTE- BARMM Science Learning Modules, focusing on its accessibility, availability, and utilization. The importance of digital access in contemporary education is evident, with a dominance of internet downloads. However, challenges related to technology dependence call for a comprehensive approach to ensure equitable access. The positive feedback on the availability of learning modules and proposed improvement strategies underscores the commitment to enhancing the curriculum's effectiveness and addressing educators' concerns. Strategies for improvement in accessibility encompass a wide range of measures, including addressing coordination issues, promoting digital literacy, fostering collaboration, and institutionalizing access protocols.

These efforts are essential to creating effective access methods for educators, emphasizing a balanced approach that leverages both individual efforts and institutional support. Moreover, the comprehensive approach to addressing challenges in accessing MBHTE-BARMM Learning Modules involves infrastructure improvement, streamlined procedures, content adaptation, and community engagement. This approach aims to contribute to a more inclusive and effective learning environment for educators and students alike. Additionally, findings emphasize the multifaceted nature of module integration, requiring ongoing support, strategic planning, and adaptive approaches to ensure effective utilization in teaching practices.

The evaluation of MBHTE-BARMM Science learning module implementation indicates a consistent acknowledgment of the modules' availability. Participants consistently convey positive feedback, highlighting the overall positive response regarding the accessibility of MBHTE-BARMM Learning Modules. This suggests that proposed improvement strategies aim to enhance the curriculum's overall effectiveness, addressing specific concerns raised by educators for a more impactful learning experience. Concerning the accessibility of MBHTE-BARMM learning modules, the prevalence of internet downloads underscores the crucial role of digital access in contemporary education.

This implies that while internet-based distribution is widespread, challenges associated with technology dependence necessitate a comprehensive approach to ensure equitable access. Regarding utilization, there is an emphasis on continuous and encouraged usage to foster a consistent learning environment. This implies that the ongoing encouragement aligns with effective teaching practices, ensuring that educators capitalize on valuable resources. Continuous relevance, denoting continuous and highly encouraged usage of resources, indicates the sustained significance of MBHTE-BARMM Learning Modules in the teaching practices of educators.

Issues and challenges in the implementation of MBHTE – BARMM Science learning modules reveal technical, pedagogical, and organizational hurdles. Technical issues, such as typographical errors, underscore the need for thorough proofreading and editing before module distribution to ensure accuracy and reliability. Pedagogical challenges involve the high level of questions and information in modules, impacting learners' ability to express themselves effectively. This implies an issue with cognitive load, necessitating the simplification of learning modules for the target Bangsamoro learners. Organizational issues highlight concerns about some teachers' reluctance to share knowledge, potentially hindering a collaborative learning environment. Thirdly, suggestions for improving MBHTE-BARMM learning modules consistently emphasize the importance of cognitive simplicity. Participants advocate for simplicity in modules, implying the significance of clarity and comprehension. Bangsamoro teachers recognize potential challenges in learner understanding and propose strategies to enhance overall comprehension. Overall, the findings reflect a teacher-centric perspective on enhancing the utilization of MBHTE-BARMM Learning Modules.

Suggestions for improving the implementation of the use of MBHTE-BARMM Science learning modules consistently target Ensuring Accessible Learning. This includes localizing learning content, ensuring ease of access and availability, tailoring to children's cognitive level, timely weekly module availability, differentiation for diverse learning needs, and employing diverse distribution channels. Grounded in the findings of the study, this paper proposes the SPECTRA model, a comprehensive framework designed to address identified challenges and enhance the overall effectiveness of MBHTE-BARMM Learning Modules in the Bangsamoro region.

Continuous efforts are recommended, focusing on cultural relevance, alignment with the central curriculum, effective module structure, and addressing challenges related to comprehension, printing, accessibility, and content dynamics. Ongoing evaluation and refinement are crucial for adapting modules to evolving student and educator needs.

On the other hand, the identified areas for improvement in instructional design and the recognition of the multifaceted strengths and weaknesses of learning modules being implemented in MBHTE - BARMM calls for continuous efforts. Critical findings that were explored in this study which revealed of the several key areas that MBHTE–BARMM need to address for the improvement of the implementation of the learning module, entails that releasing or production of learning modules need to undergo first thorough evaluation and a smooth systematic way of production and distribution. While this study shed light on the status of the implementation of the learning module in the BARMM region, more studies need to be conducted to also explore the other regions as to the learning materials they implemented.

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# A Qualitative Study on MBHTE-BARMM Supervisors’ Approaches to Achieving Work-Life Responsibilities

Asnaida T. Lampaco<sup>1</sup>, Minerva-Saminah M. Naga<sup>2</sup>, Wardah D. Guimba<sup>3</sup>, Lotis B. Daguisonan<sup>4</sup>

<sup>1,2,3,4</sup>Department of Graduate Education, College of Education, Mindanao State University-Main Campus, Marawi City, Lanao del Sur, Philippines

Correspondence: Asnaida T. Lampaco. Email: [asnaidalampaco@yahoo.com](mailto:asnaidalampaco@yahoo.com)

## Abstract

This study explores the approaches employed by supervisors in the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM) in attaining work-life responsibilities. Employing a qualitative study design, it delves into the experiences of the research participants in their strive to balance their professional roles with personal life commitments. Data collection involved in-depth interviews, observation, and narrative analysis, involving a sample of twenty-five (25) supervisors from diverse divisions and programs in the BARMM. The findings of the study unveil several crucial dimensions of the participants’ experiences and strategies. It becomes apparent that they experienced multitasking hence, learned to prioritize tasks which is a testament to the dynamic and multifaceted nature of their roles. In terms of strategies, the study reveals that they predominantly rely on time management and advance planning to deal with the balancing of work and personal life. Moreover, personal, and professional factors that affect their approach to achieving work-life balance include personal problems, inability to balance time, and commitment to work. The research participants also face specific challenges such as resource shortages and overwhelming workloads. This study further highlights the participants’ expected support from schools and districts through communication and mutual understanding. Based on the findings of the study, a model was generated. This model reveals three dimensions of work-life responsibilities namely (1) personal and professional responsibilities, (2) internal support, and (3) external support.

**Keywords:** Work-Life Responsibilities, Phenomenological Study, Education Supervisors, Work-Life Balance

## 1. Introduction

In today's fast-paced and demanding world, finding a balance between work and life has become increasingly challenging. As people strive to excel in their careers, meet deadlines, and achieve professional success, it is easy to lose sight of the importance of personal well-being and quality time with loved ones. Balancing work and life are not just about managing time effectively; it is about prioritizing one's physical and mental health, nurturing relationships, and finding fulfillment in both professional and personal spheres.

Balancing work-life among career employees or career-oriented individuals, for instance, school administrators, is more challenging. Among authors on stress and mindfulness, Oishi and Westgate (2022) asserted that living an

authentic life with a sense of purpose and balance is the key to true happiness. This sentiment emphasizes the importance of maintaining a work-life balance, as work and personal life are interconnected. Similarly, Mayaer (2022) described work-life as the effective management of professional and personal demands. As such, it is crucial for school administrators like supervisors, to prioritize work-life balance to maintain their wellbeing, promote a healthy work environment, increase productivity and performance, and experience higher career satisfaction.

According to Leshner (2012), supervisors serve as educational leaders who work in divisions and departments across the academy. Wilk (2013) added that supervisors are present in the superintendent's office, student affairs, athletics, development, academic departments, and other areas. While faculty have academic and instructional responsibilities, administrators are responsible for addressing students' non-instructional needs, engaging in day-to-day problem solving, and facilitating long-term institutional planning.

In fact, they are expected to undertake administrative work and often work long hours, face a heavy workload that may negatively impact their personal relationships due to lack of energy, time, and commitment. Because of this, supervisors struggle to balance personal and professional concerns, leading to positive and negative spillover (Bell, et al., 2012). When conflict between work and family occurs, it can have adverse effects not only on organizations but also on employees and their families. Similarly, Whitehead and Kotze (2003) as cited in Baltes, et al. (2011) argued that work-family conflict has negative impact on both organizational and individual-level outcomes hence, work-life balance is a crucial aspect of a supervisors' lives, particularly in the context of their professional careers.

Previous studies on work-life balance shed light on different factors influencing work-life balance, such as sociocultural challenges (Edwards & Oten, 2019), parenting (Dapiton et al., 2020), single-parenting (Alonge & Osagiobare, 2020; Encila & Madrigal, 2021), resilience during a pandemic (McBrayer et al., 2022), remote teaching (Rawal, 2023; Dulay, 2022), gender (Persson & Hakansson, 2018), demographic variables, administrative staff burnout, among others. By examining these studies, it provides comprehensive understanding on the complexities surrounding work-life balance and the implications for various professional roles and gaps in literature.

Edwards and Oten (2019) highlighted the sociocultural challenges faced by female teachers when balancing domestic roles and teaching. Their study revealed the importance of considering cultural factors in addressing work-life balance. In the study by Denson and Szelényi's (2022), it showed that single faculty members had a lower work-life balance compared to married/partnered faculty. Aside from civil status, gender is also a crucial factor. In the study of Persson and Hakansson (2018), they identified gender-related stressors among Filipinos – women experience more stress due to balancing multiple responsibilities, while men felt greater pressure to provide for their families.

Moreover, Dapiton et al. (2020) focused on the role of parenting in moderating work-life balance, particularly among female academics in the Philippines. The study highlighted the need for support systems to help balance family commitments and research productivity. Alonge and Osagiobare (2020) and Encila and Madrigal (2021) also conducted a study on parenthood and work-life balance in Nigeria and the Philippines, respectively participated by single-parents or solo-parents. The latter's paper revealed that solo-parent administrators used coping mechanisms and time management to balance their roles effectively while the former's study found that single-parent teachers face challenges in job productivity, but there was no significant relationship between work-life balance and job productivity.

In some studies, the context of work-life balance was investigated during the time of COVID19 pandemic or the challenges of remote teaching. McBrayer et al. (2020) conducted a study on school leadership during a global health pandemic which revealed that teachers are committed to their careers despite the challenges of teaching during a crisis. Protective factors, such as energy levels and meaningful connections, play a role in preventing teacher burnout. Rawal (2023) also found that teachers, specifically female teachers, experienced stress due to long hours of work during pandemic. Meanwhile, the study of Dulay (2022) revealed the various challenges teachers faced during emergency remote teaching, particularly during the COVID-19 pandemic. Such challenges

included workspace inadequacy and irregular working hours, which affected both work and personal life. Moreover, Kandemir and Nartgün's (2022) study found that distance education negatively affected teachers' work-life balance, leading to role conflict and interference with family duties.

Furthermore, burnout at work was also found to be one factor influencing work-life balance. Li and Ye (2022) investigated burnout among administrative staff in a university setting and identified a significant relationship between role conflict, ambiguity, and burnout. This highlighted the importance of addressing workload and role clarity among administrative staff. This study confirmed the findings of Rath (2020) who explored administrators' experiences during restructuring, emphasizing the significance of building relationships and coping with emotions during transitions. Lastly, Raabe (2021) also reported problems managing the conflicting demands of work and their life.

These aforementioned studies on work-life balance appear to be focused among teachers and parents while only a few studies explored work-life balance among supervisors or administrators. In fact, few studies have been conducted to investigate the approaches and strategies dealing with supervisors' work-life responsibilities, more specifically those from the BARMM. The voices and struggles of the supervisors in balancing their career and personal lives made it imperative and interesting to explore this area of research. Thus, to fill in the gap and issues with the work-life balance among supervisors, this study described the experiences of selected supervisors in BARMM to describe and explore their approaches, strategies, and challenges in attaining balanced work-life responsibilities. Furthermore, it aims to contribute to the body of knowledge in educational leadership, particularly on the topic of work and life responsibilities by proposing a model of work-life responsibilities among supervisors.

## 2. Method

This study employed qualitative approach to explore the work-life responsibilities of supervisors. This is an appropriate design because it provides valuable insights into the unique and subjective aspects of the experiences of the research participants. According to Giorgi (2012), this focuses on exploring the experiences of individuals. It aims to cover the essences of experiences and the way people make meaning of them. Hence, this methodology allows researchers to explore how supervisors perceive and make sense of their work and personal lives, the challenges they face, the approaches they use, and the strategies they employ to balance these aspects. Their experiences were examined through interview sessions, observation of their typical day at work, and their personal narrative reports.

This study was conducted within Bangsamoro Autonomous Region in Muslim Mindanao (BARMM) in the Philippines. The researchers deemed that this would be the ideal research setting as the need was felt to conduct this study in MBHTE (Ministry of Basic, Higher and Technical Education) in BARMM to improve the approaches of BARMM supervisors in achieving work-life responsibilities. In addition, given the different cultures that comprise the Bangsamoro people, it would be interesting to see different experiences and different perspectives, as well as different strategies for work-life balance based on the responses of the participants on their individual contexts.

To identify the participants, purposive sampling was done. It was an appropriate sampling method in this study for the very reason that it allowed the researchers to target a specific group of interest that aligns with the research question (Baumgartner and Schneider, 2010). The research participants of the study were twenty-five (25) supervisors from different division areas and programs in BARMM who met the criteria and were willing to participate. They were chosen as participants because of their status, experience, and knowledge in their respective fields. The selection criteria for the participants were mother, married, have children, with a minimum of two (2) years of experience as supervisors, prior to becoming supervisors, and teachers. There were four (4) participants in each division while five (5) participants in Marawi City who met the given criteria. The career experiences of all the participants clearly demonstrated that they are devoted to their work and passionate about education. The information described their individual demographic characteristics both personally and professionally, their educational experience and their current family status.

Thematic analysis was utilized in the study. The following were the steps utilized by the researchers to analyze the collected data: First, the interview recordings were transcribed. Prior to transcribing, the technique of bracketing was applied by the researchers. Bracketing is a technique used to suspend or set aside the researcher's knowledge, perceptions, or attitudes towards the phenomenon (Creswell, 2014). After the bracketing method, the interview data were then transcribed. Second, the interview transcripts were read several times by the researchers for more familiarity and understanding of the essence of the experiences of the participants. Coding was then followed. After coding, the keywords were categorized to generate themes. Thematic analysis is a common tool in qualitative research which is a useful and accessible tool that enables researchers to generate new insights and concepts derived from the data. The last stage of the data analysis was the generation of a model. The model was generated after a critical analysis of the themes that emerged from the data. The researchers came up with dimensions that would describe a model of work-life responsibilities that frame the experiences of supervisors in BARMM.

### 3. Results and Discussion

#### 3.1. *Experiences of Supervisors in Achieving Work-Life Responsibilities*

##### 3.1.1. Multi-tasking

Supervisors play various roles and responsibilities, especially in the Department of Education. Thus, multi-tasking was one of the common experiences that the participants shared. Having excellent multitasking skills may even allow an employee to maintain his/her position in the organization. In many ways, multitasking appears like a good habit by working on more than one task at once and multitaskers are proven to be more productive. However, even though multitaskers might seem better at their work, several studies reveal that multitasking harms productivity.

Based on this study, eight (8) out of twenty-five (25) participants answered multi-tasking as one of their experiences. According to the participants, as they shared the various responsibilities playing their role as supervisors, multi-tasking has become an important tool in their workplace. With intense pressure on time and finishing multiple tasks, not to mention their responsibilities at home, they were forced to multi-task to save time. This also came with managing their own time.

This finding reveals that supervisors play various roles and responsibilities. The scope of work of a supervisor that he or she needs to supervise is relatively wide based on district or educational programs. Supervisors in the MBHTE – BARMM engaged in a wide array of tasks, including overseeing educational programs, managing personnel, ensuring compliance with educational policies, and addressing the diverse needs of students and educators. This multifaceted responsibility indicated the depth and breadth of their involvement in the education system.

This study aligns with previous research highlighting work overload and multitasking as challenges. Li and Ye (2022) found administrative staff experiencing burnout due to workload, confirming similar feelings among participants in this study. While multitasking is often seen as a positive skill, research by Dux (2014) and Gafman (2013) shows it negatively impacts individual and organizational productivity. This includes reduced quality, workflow inconsistencies, and lack of preparation. These findings suggest potential areas for addressing workload and promoting focused work within the organization.

##### 3.1.2. Making Priorities

The participants had first shared that one of their experiences was to multi-task due to their heavy workload. Following this was their experience of prioritizing to balance their work and their life at home with their family. Thus, as they are bombarded with countless tasks and demands, the theme of the importance of making priorities emerged from the participants' inputs. Based on the data of the study, five (5) out of twenty-five (25) participants shared that making priorities was one of their experiences. Due to hectic schedules and responsibilities, participants

shared that they had to make priorities sometimes that either compromise their work and their families or successfully achieve a balanced work-life responsibilities.

These findings depicted a complex relationship between the prioritization of work over personal life, the establishment of boundaries and schedules, the delegation of tasks, and the acknowledgment of the need for balance between various roles in the case of supervisors in MBHTE – BARMM. These also suggested that supervisors employed various strategies to manage their work-life responsibilities, with some expressing the challenges of sacrificing personal time for professional duties, while others emphasized the importance of proactive planning and support systems.

This study aligns with research emphasizing the importance of prioritization for work-life balance. Yang (2020) and Marsh-Girardi (2011) advocate for prioritizing tasks, especially for supervisors, to manage time effectively. However, Asfahani (2021) highlights the potential of prioritization to create conflict and distress when focusing on one aspect over the other. This underscores the need for a nuanced approach to prioritization that considers individual contexts and the potential for negative consequences.

### *3.2. Strategies Supervisors Used to Achieve Work-Life Responsibilities*

#### *3.2.1. Time Management with Priorities*

Given the complex roles of supervisors, the participants shared that their main strategy to achieve work-life responsibilities was to have the time management, with emphasis on prioritization. Based on the data, eight (8) out of twenty-five (25) participants shared that time management was one of their strategies. The reflective decision making shared by the participants was a thoughtful approach beneficial to time management.

These findings implied that the research participants applied a proactive approach to managing time and ensuring that there were no overlapping commitments. This proactive approach could contribute to reducing stress and allowing supervisors to better balance their professional and personal commitments. Micro-strategies such as collaboration and effective communication with colleagues could play a crucial role in managing work responsibilities, especially when an individual could not handle everything independently. Moreover, with the kind of culture and tradition that Moro people are known for, such as having strong ties with kinship entails that in every event or ceremony, it is part of their social obligations to attend or be present in it hence adding to the avalanche of work-responsibilities in their personal and professional lives. Nonetheless, it can be said that time management and prioritization help them in managing their complex responsibilities as supervisors.

Participants' micro-strategies like scheduling, planning, and organizing align with existing research on effective time management (TM) for work-life balance (WLB). This supports Sahito et al.'s (2016) claim that efficient TM involves planning, organizing, and implementing tasks to achieve goals and ensure employee and organizational sustainability. While TM lacks a universal definition, Eilam and Aharon (2003) emphasize its importance in monitoring and controlling time for task completion. Studies like Encila and Madrigal (2021) and Grissom et al. (2015) demonstrate the effectiveness of TM in balancing roles and reducing job stress. Additionally, Khodaveis et al. (2015) and Macan (1994) link improved TM skills to reduced stress and physical symptoms, highlighting its positive impact on quality of life.

#### *3.2.2. Advance Planning*

Planning for the preparation and support for current schools and districts' programs, activities, and others is important to supervisors and for educational leadership programs. Based on the data gathered, five (5) out of twenty-five (25) participants shared that advance planning is an important strategy. Time management coupled with advance planning for all the tasks that needed to be done both at work and home is of critical importance to supervisors and institutions of higher learning that have educational leadership programs. As gleaned from the interview transcripts, it highlighted the importance of time management and planning as another essential strategies for achieving work-life balance among supervisors.

Educational leaders, like supervisors, are charged with guiding teachers and others to improve the learning experience for all students, K-12 and beyond, while also respecting their cultural differences. Studies have shown that ineffective planning causes poor teaching and hazy preparation of a budget. Inadequate funds to procure materials needed for planning and supervisors' not involving the concerned staff in planning are also causes of poor planning. Government should provide periodic in-service training on planning for principals and principals should practice good communication skills (Manafa, 2019). Supervisors must establish laborious yet attainable planning to assess the loads of work that they need to do and the process of planning and time management on the part of the supervisors helped improve the schools' or education's need for effective planning, implementing and monitoring and evaluation of various programs of the division. This is a way of determining the gaps between the current school condition and the potential for improvement. To the highest level of effectiveness, the school planning must be in dynamic procedures to engage data and people.

### 3.2.3. Self-Care and Health

Taking care of one's physical and mental health is crucial for a supervisor to maintain productivity and well-being as they navigate through their complex array of responsibilities. Eight (8) out of twenty-five (25) participants shared that self-care and health were other noted strategies. In terms of self-care and good health, participants shared specific ways to maintain this aspect such as recognizing body as capital maintenance, having good physical, spiritual and mental health, and being aware of aging and the consequences that come with it hence taking medication to keep a healthy body.

These findings on self-care and health as one of the strategies employed by the participants to achieve work-life responsibilities illustrated a multi-faceted and proactive approach to self-care and health among supervisors in MBHTE - BARMM. The emphasis on exercise as a form of self-care aligned with the understanding that physical activity has numerous health benefits, including stress reduction and increased energy levels. The importance of providing necessary vitamins for the body indicated an awareness of nutritional needs.

This perhaps may be understandable given that BARMM is a region mostly inhabited by Muslims who firmly believe that one's health and body must be prioritized and taken care of. This is inspired from the hadith or saying of the Prophet Muhammad (peace and blessings be upon him) that a person's body has a right over him or her; suggesting for every Muslim to take care of his or her health as it is part of one's duty to protect and take care of his or her body. In addition, this also implied a holistic approach to health, considering both macro-level factors such as sleep and micronutrients. Thus, self-care and health are recognized as crucial strategies employed by supervisors to achieve work-life balance and responsibilities.

Recent studies also underscored the essence of health and well-being. Mayaer (2022) described work-life as the effective management of professional and personal demands that include prioritizing work-life balance to maintain their wellbeing, promote a healthy work environment, increase productivity and performance, and experience higher career satisfaction. McBrayer et al. (2020) shared that the protective factors, such as energy levels and meaningful connections, play a role in preventing burnout. Lastly, Hinds (2022) emphasized that supervisors, who juggle from one work to another, need to make the work manageable and to have healthy balance between personal and professional responsibilities. Acknowledging the various strategies of self-care and health, it is a good indication that the supervisors from BARMM are employing this strategy which help them become more effective and efficient as they try to keep the equilibrium between their work and domestic roles.

### 3.2.4. Open Communication

Having the ability to express the individual's thoughts while interacting with other people is an open communication. It is an ability to provide ideas, information, and suggestions, to give and receive feedback, and raise concerns to make the participants active in the workplace. Nine (9) out of twenty-five (25) participants shared similar strategy and stressed the significance of having open communication, especially with their colleagues.

These findings entailed that in the context of MBHTE – BARMM, clear and effective open communication among supervisors were seen as a fundamental strategy to accomplishing work-life responsibilities. Open lines of communication could lead to better coordination and understanding among team members. This strategy suggested that a supportive and inclusive communication style contributed to positive relations and, in turn, enhances work-life balance. The focus on disseminating correct information implied that accurate and timely communication was essential for successful task execution among the research participants. Moreover, the use of technology and other channels to communicate showed that supervisors aimed to properly communicate with their subordinates and enhance overall efficiency.

Selzer et al. (2017) enumerated various characteristics of a leader namely the ability to know the communication styles, and ability to promote cooperation, collaboration, and communication style. Robertson (2016) also claimed that administrators should emphasize teamwork and authentic communication as a key to success. Likewise, according to Rao and Mohan (2008), achieving a certain level of personal growth could be related to the quality of communication in the organization and more to the rewarding nature of the job where employees preferred adequate challenges without compromising their work values. Henceforth, effective communication, collaboration within teams, and the utilization of modern communication tools were essential strategies for supervisors to achieve their work-life responsibilities. These strategies contributed to a supportive work environment, facilitate the sharing of information, and enhanced overall efficiency in managing both professional and personal aspects of life of the research participants.

### 3.2.5. Spiritual Guidance through Prayers

Reflecting on individual's life direction and growing by recognizing the presence of God is the notion of spiritual guidance. Seven (7) out of twenty-five (25) participants considered seeking spiritual guidance or praying to Allah (God) as another common strategy employed by the participants. The primary strategy discussed in the data was the religious aspect of praying and asking guidance from a higher power, particularly from Allah.

These findings implied that supervisors in the BARMM were practicing Muslims who were aware of their duties as Muslims and had strong beliefs in the guidance of Allah (God) and His plan. It suggested that maintaining a positive mindset through prayers was an essential aspect of dealing with the myriads of roles and responsibilities of a supervisor in the MBHTE - BARMM. The participants advocated trusting in a higher power to guide them in both professional and personal aspects of life. This trust was seen as a source of comfort and assurance in facing the demands of their supervisory roles. Furthermore, the participants employed a unique blend of spiritual and practical strategies to cope with the demands of their supervisory roles. Simultaneously, there was an acknowledgment of the need for self-care, positive thinking, and breaks from work-related stress.

This study delves into a novel aspect of work-life balance (WLB) by exploring the role of spiritual guidance among Muslim supervisors in BARMM. Existing research on WLB lacks such focus. Interestingly, participants identified prayer as a coping mechanism, highlighting the influence of their strong spiritual beliefs on managing work-life challenges. This finding aligns with studies on WLB and Islamic perspectives, demonstrating a positive link between religiosity and WLB. For example, Yusuf and Sajid Khan (2015) found a positive relationship between WLB and well-being among religious employees compared to their non-religious counterparts. These findings suggest that, for these supervisors, spirituality and self-care are interconnected strategies for achieving WLB. This unique combination offers a potentially valuable framework for managing supervisory challenges while maintaining overall well-being. Further research can explore the specific practices and mechanisms through which spirituality contributes to WLB in this context.

## 3.3. Factors Affecting Supervisors' Approaches to Achieving Work-Life Responsibilities

### 3.3.1. Personal Life and Family

Eight (8) out of twenty-five (25) participants shared that one of the common factors that affected the participants' approaches to achieving work-life responsibilities was their ability to deal properly with matters of their personal



and family life. These findings implied that external demands, such as social obligations or domestic responsibilities with their spouses and children, could impact a supervisor's ability to manage his or her work-life balance, as in the case in BARMM. The BARMM region, which is predominantly inhabited by Muslims, for example the Meranaws, emphasized the value on family and social obligations. The Meranaw people are known for attaching great importance to their familial and social responsibilities.

These cultural and social norms may have implications to the work-life balance of supervisors in the MBHTE - BARMM. It suggested that external demands, such as fulfilling social obligations or attending to domestic responsibilities could have an impact on a supervisor's ability to effectively manage their work-life responsibilities in this specific cultural and regional context. The finding further suggested that these external demands from their personal lives may affect how well supervisors could juggle their work responsibilities with their family and social commitments, potentially making it challenging for them to maintain a satisfactory work-life balance.

This study aligns with previous research highlighting the impact of family on work-life balance (WLB) for supervisors. Studies by Li and Ye (2022) and Bell et al. (2012) demonstrate the "spillover" effect, where work-family conflict negatively impacts individuals, families, and organizations. This conflict reduces job satisfaction and affects WLB, as shown by Talukder (2019).

However, research findings are mixed. While Whitehead and Kotze (2003) found no individual-level impact, supervisors in this study identified family-related challenges as hindering their WLB achievement. Supporting this, Dapiton et al. (2020) recommend support systems to manage family commitments and work productivity.

### 3.3.2. Inability to Balance time

It can be quite challenging if time, which is the most limited and most precious resource available to the administrators, is not well managed. Five (5) out of twenty-five (25) participants mentioned lack of time as the main factor in failing to do what school heads needed to accomplish. Some participants manifested about what they wanted to do but could not accomplish while others mentioned having to take shortcuts that were not adequate solutions.

The results underscored the issue of time constraints in the lives of supervisors. These supervisors were aware of the need for rest and relaxation, struggle with prioritization due to limited time, and acknowledge the impact of time constraints on both personal and professional aspects of their lives.

This study aligns with researches highlighting the time pressures faced by supervisors like the participants. As noted by Britton and Glynn (2013), juggling high demands in limited time is common for intellectually productive professionals. For supervisors, this translates to managing school operations, programs, and staff relations – all time-intensive tasks.

Effective time management emerges as a crucial strategy for increasing productivity and well-being in this context. Similar to previous WLB studies (Grissom et al., 2015; Soomro et al., 2018; Mendis & Weerakkody, 2017), this study finds a clear connection between strong time management skills and reduced stress, improved job satisfaction, and ultimately, better job performance. This aligns with Kamran et al. (2014) suggesting flexible work arrangements like reduced hours can positively impact both WLB and productivity. These findings suggest exploring time management techniques and flexible work policies as potential avenues to support supervisors, enhance their well-being, and consequently improve school outcomes.

### 3.3.3. Commitment to Work

Achieving a harmonious balance between personal and professional responsibilities is a perennial challenge for education supervisors. From the various struggles of juggling from one task to another, driven by their commitments to their personal and professional qualities, the participants shed light on various dimensions that impacted their work-life responsibilities. Seven (7) out of 25 participants answered commitment to work as another factor affecting supervisors' approaches to work-life responsibilities.

Understanding the multifaceted nature of factors influencing the ways supervisors approached their work-life responsibilities held significant implications in the context of BARMM. This means that school's division in MBHTE - BARMM may benefit from promoting environments that align with individuals' sense of purpose, emphasizing the integration of personal and professional qualities. Recognizing and supporting the diverse challenges among BARMM supervisors related to commitments, childcare, and health could contribute to more holistic well-being of supervisors. Lastly, promoting a work-life culture that values devotion, passion, and commitment may enhance job satisfaction and productivity, ultimately leading and promoting a healthier work-life responsibilities for supervisors.

Dapiton et al. (2020) highlighted the need for support systems to help balance family commitments and research productivity. In another study, commitment appeared to have high impact on WLB like the study of Hausman et al. (2002) that revealed that in terms of work-life indicators such as professional commitment, community support, sense of efficacy, goal congruence, and balance between personal and professional life; the only indicator with a low rating was balance. This meant that the participants struggled with commitments, thus, having difficulty in balancing their personal and professional lives.

## 3.4. *Challenges Encountered by Supervisors in Achieving Work-Life Responsibilities*

### 3.4.1. Lack of Resources

Achieving work-life responsibilities is a constant struggle for many professionals, particularly supervisors who shoulder the responsibility of managing both the demands of their work and personal lives. Ten (10) out of twenty-five (25) participants shared that one of the major challenges they encountered was lack of resources.

The findings entailed the urgent need for the BARMM to address the various challenges faced by supervisors in achieving work-life responsibilities, specifically on lack of resources. Recognizing the limitations imposed by inadequate time, budget constraints, and technological gaps, lack of resources was crucial in creating supportive measures. The MBHTE-BARMM must consider implementing strategies to streamline processes, allocate sufficient resources, and provide the necessary support structures. Furthermore, the study highlighted the need for contextual solutions, particularly in regions undergoing transitions like BARMM. Policymakers and leaders should work towards finalizing and implementing key frameworks, such as education codes, to ensure that supervisors have the necessary tools and budgets aligned with their responsibilities. Failure to address these challenges not only impacts the well-being of supervisors but also hampers the overall effectiveness of programs and initiatives.

According to Owoko (2010), the term resources referred not only to teaching methods and materials but also the time available for instruction, the knowledge and skills of teachers acquired through training and experience. Teaching pupils with special needs in the inclusive classroom deviated from the regular programme. Pupils with special needs may require more instruction time, other learning methods and professional knowledge. This could be achieved by an increase in resources or by re-arranging available resources. Children with special needs are not required to meet the classroom standards, rather the classroom meets the individual needs of all children (Bargma, 2000). Puri and Abraham (2004) argued that school management and teachers should make efforts to identify and attend to learners with special learning needs for instance dietary needs especially pre-school. Oyugi and Nyaga (2010) noted that teaching and learning resources include peripatetic services, support staff (sign language interpreters and Braille transcribers), community involvement, regular and special teachers among others.

Inadequately trained special education teachers and professionals acts as an obstacle to implementation of inclusive education (Kochung, 2011).

#### 3.4.2. Overlapping Workloads

Overlapping workloads happen when the end of one activity, program, etc. overlaps with the start of another. Through the interviews with twelve (12) out of twenty-five (25) participants, it was evident that the demands of their roles significantly impact their personal lives, leading to sacrifices and struggles in managing time effectively due to their overlapping workloads.

These findings implied the need for officials in the MBHTE – BARMM to balance work commitments that needed meticulous planning to prevent overlaps and to ensure efficient time management among supervisors. The findings also underscored the complex challenges that supervisors faced in trying to resolve their work and personal life. The sacrifices made, time constraints, and the impact on personal well-being highlighted the need for organizational support and flexibility. This support may begin at the top level in the MBHTE – BARMM.

This study aligns with prior research highlighting workload challenges faced by both new and experienced school leaders. Sarwar et al. (2012) and Oleszewski et al. (2012) emphasize the burden of administrative tasks on teachers and supervisors, impacting their teaching and leadership effectiveness. Studies by Wambui et al. (2017) and Sirgy and Lee (2017) further illustrate diverse challenges like resource limitations, accountability demands, and student discipline.

### 3.5. *Schools and Districts' Support for Supervisors in Achieving Work-Life Responsibilities*

#### 3.5.1. Proper Communication

For communication to be effective, communication skills needed to be appropriately observed such as learning to interact with others, and discuss issues, concerns, and problems. Twelve (12) out of twenty-five (25) participants shared proper communication as one of the supports that the participants received from schools and districts.

The findings underscored the critical role of effective communication and strategic dialogue in fostering a supportive environment for supervisors. The emphasis on transparent communication with higher-ups, particularly superintendents, suggested that the culture or norms in an organization played an important role in facilitating work-life balance. Schools and districts may consider formalizing and strengthening communication channels, fostering an atmosphere where supervisors felt comfortable expressing their needs and challenges. Training programs that enhanced communication skills and promote understanding between supervisors and higher-ups could also contribute to a healthier work environment.

On the other hand, in BARMM where there are diverse ethno-linguistic groups, effective communication among supervisors requires a nuanced approach. The term "ethno-linguistic groups" refers to communities that share not only a common language but also cultural and ethnic ties. The first aspect mentioned is the language used for communication. The diversity of ethno-linguistic groups in BARMM implies that there may be various languages spoken among supervisors. To facilitate effective open communication, BARMM supervisors need to be proficient in the languages relevant to their teams or colleagues. This linguistic diversity poses a need for language-sensitive communication strategies, ensuring that information is accurately conveyed and understood across different language backgrounds.

Aligning with Mohammadi (2010), the study emphasizes the need to go beyond mere language fluency and be attuned to sociolinguistic nuances like non-verbal cues and formality levels. This ensures that communication is not only accurate but also respectful and fosters strong working relationships. Further, drawing on Sryono (2017) and Smith et al. (2017), the study underscores the critical role of effective communication in achieving educational goals. Recognizing and adapting to diverse communication styles within BARMM schools becomes crucial for supervisors to effectively lead, inform, and collaborate with stakeholders. This cultural sensitivity not only

enhances individual well-being but also contributes to the overall effectiveness and sustainability of educational leadership in the region.

### 3.5.2. Cooperation and Active Participation

Through the interview with seven (7) out of twenty-five (25) participants, they considered cooperation and active participation as another support that may come from schools and districts that would help the supervisors in achieving their work-life responsibilities. This common perspective among supervisors on the support they need from schools and districts in facilitating their work-life responsibilities shed light on the complex ways in which schools and districts could extend assistance. The participants disclosed various forms of support to which the schools and districts could provide active participation and cooperation. This encompassed financial support, administrative support, cooperative efforts, involvement, coaching, and constructive feedback.

The identified support mechanisms through cooperation and active participation of schools and districts implied that fostering a conducive environment for BARMM supervisors involved a comprehensive approach. Schools and districts in the MBHTE - BARMM may consider aligning their budgetary allocations with the diverse needs of projects, streamlining administrative processes, and emphasizing cooperative efforts among their teachers and other stakeholders. Additionally, recognizing the importance of competent and committed leadership at the school and district levels suggested that investing in professional development and leadership training could enhance the overall effectiveness of educational supervision. Ultimately, these insights could guide MBHTE - BARMM in formulating policies and practices that prioritize the well-being and success of educational supervisors, contributing to a more robust and sustainable educational system.

This study aligns with prior research on support systems' effectiveness. While Edwards and Oten (2019) found mixed results regarding their impact on teacher resilience, Dapiton et al. (2020) highlight the need for support, particularly for female academics, in balancing family and work. Interestingly, supervisors in this study identified "cooperation and active participation from school heads" as a key support need. This resonates with Selzer et al.'s (2017) view of leaders fostering cooperation and Yang's (2020) emphasis on collaboration to share workload and achieve better work-life balance (WLB). These findings suggest that providing supervisors with collaborative support structures, alongside addressing identified needs like school head engagement, could potentially enhance their WLB and overall well-being.

### 3.5.3. Proposed Model of Work-Life Responsibilities

The findings of the study based on the various aspects of work-life responsibilities among supervisors revealed the tough job that a supervisor must face. Nonetheless, despite these challenges and predicaments, they were able to pull through and balance the various hats they were wearing. Building from the themes generated, Figure 1 below displays the proposed model of work-life responsibilities.

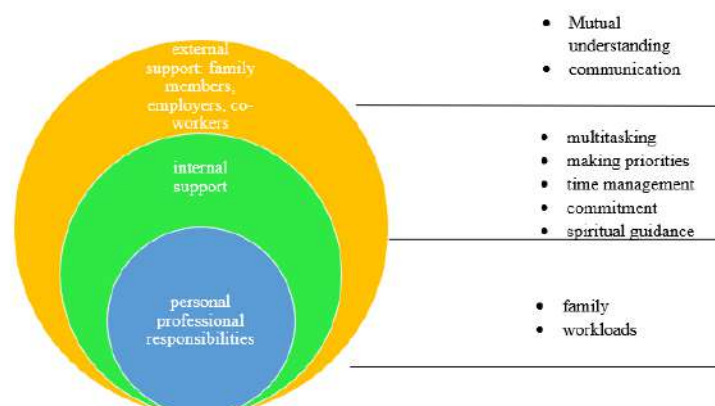


Figure 1: *Model of Work-Life Responsibilities*

As shown in Figure 1, the proposed model of work-life responsibilities has three components: personal and professional aspects, the internal support, and the external support. The model emphasized the hierarchy, and the organization of constructs and factors that should be taken into consideration when a supervisor attempts to balance his or her work-life responsibilities. At the bottom of the diagram was the personal and professional responsibilities which emphasized the determination of the two core duties and responsibilities of a supervisor in the basic education. This underscored the need for supervisors to be aware that their job as supervisors is expected to be complex and critical because of the two responsibilities expected of them to fulfill.

Following this, the second dimension was internal support. This highlighted the intrinsic aspects or abilities and skills that supervisors needed in order to manage well and create that balance between their personal and professional duties. These abilities appeared to be requisites that would help the supervisors to somehow balance their work-life responsibilities.

Lastly, the last dimension was the external support. External support was another crucial factor that kept the balance in the work-life responsibilities of supervisors. These external supports that come from people scaffolded the achievement of work-life balance that may bring sanity, peace, and general well-being among supervisors.

In a nutshell, the model provided a structured approach for supervisors to navigate their work-life responsibilities, emphasizing the interplay between personal and professional aspects, internal support, and external support. Understanding and addressing these dimensions were essential for supervisors not only in the BARMM region but in other regions aiming to achieve a harmonious balance in their professional and personal lives, too.

#### **4. Conclusion**

This study delved into the approaches used by supervisors in the BARMM region to achieve work-life balance. The findings shed light on several key aspects of their experiences and strategies. First, it was evident that supervisors in this region frequently engaged in multitasking and prioritized tasks to manage their roles effectively. This underscored the dynamic and multifaceted nature of their responsibilities.

In terms of strategies, the study revealed that time management and advance planning were fundamental tools employed by the study participants to manage the challenges of balancing work and personal life. These strategies enabled them to allocate their resources properly and maintain control over their demanding roles. However, some factors significantly affected their ability to attain work-life responsibilities such as dealing with family problems, struggles with time management, and the strong commitment to work. Furthermore, supervisors faced distinct challenges in their pursuit of balanced work-life responsibilities, including a lack of resources and overlapping excessive workloads. These challenges placed an additional burden on their already demanding roles. Lastly, the study highlighted that effective support from schools and districts revolved around communication and cooperation and active participation. This emphasized the importance of fostering open and empathetic forms of communication between supervisors and their educational institutions to better address their unique needs.

In conclusion, the study proposed a three-dimensional model of supervisor's work-life responsibilities, highlighting the interconnected nature of external support from family, colleagues, and superiors, the need for internal psychological and emotional support, and the myriad personal and professional responsibilities that supervisors must navigate. This model provided a holistic framework for understanding and addressing the complex interplay of factors influencing supervisors' work-life dynamics.

The findings confirm or corroborate much of the research done previously on the same lines. School administrators such as supervisors, especially those who are partnered and with families, undergo and encounter a great deal of stress and strain which affect their work-life balance, but with continued support from within and outside of the family, some time management, some prioritizing and planning, these are all manageable and thus, supervisors are able to have that equilibrium between work and life. In addition, the data and its accompanying analysis has been able to give a reasonable, if not profound, understanding of the theories used in the study.

In light of the aforementioned findings of the study, the implications drawn from this study were far-reaching and these deserve to be translated into actions by the BARMM in particular and in the country in general. The MBHTE and educational institutions in the BARMM may consider policies institutionalizing and incorporating the identified strategies into training programs (such as seminars, or workshops) for their supervisors, emphasizing the importance of time management, self-care, and open communication. Furthermore, the structural challenges highlighted to underscore the need for resource allocation and workload management reforms at the institutional level to facilitate a more conducive work environment. Furthermore, the call for support from schools and districts implied the necessity of fostering a collaborative culture, where financial, administrative, and emotional assistance are integral components. Implementing supportive policies and practices, along with enhancing communication and cooperation among stakeholders, could significantly contribute to a more sustainable and balanced work-life for supervisors. Finally, the proposed three-dimensional model provided a comprehensive framework for guiding future research and intervention efforts, ensuring a better understanding of the intricate challenges and support structures that supervisors navigated in their professional journeys. Thus, the better the supervisors are in terms of work-life balance, the better their performance will be and possibly their job satisfaction levels will increase. There is much for the BARMM and the MBHTE to do along this line, but the results of this study and that of other researchers all point out that the above-mentioned conclusions will be beneficial not only to the target persons concerned, but also for the school constituents and the community as well.

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# School Learning Action Cell (SLAC) in the Context of Bangsamoro Autonomous Region in Muslim Mindanao (BARMM): A Policy Assessment

Nasrola M. Datumaas<sup>1</sup>, Minerva-Saminah M. Naga<sup>2</sup>, Wardah D. Guimba<sup>3</sup>, Lotis B. Daguisonan<sup>4</sup>

<sup>1,2,3,4</sup>Department of Graduate Education, College of Education, Mindanao State University-Main Campus, Marawi City, Lanao del Sur, Philippines

Correspondence: Nasrola M. Datumaas. Email: nasroladatumaas@gmail.com

## Abstract

This study attempted to propose a model of SLAC (School Learning Action Cell) grounded from the assessment of the different phases of the SLAC program and the challenges encountered in terms of its design, implementation, monitoring, and evaluation. This study employed a qualitative approach to describe the experiences of the 24 elementary school heads during SLAC sessions. These participants were from the different participating schools within the BARMM region. Employing interview sessions, document analysis, and observations, the data were analyzed using thematic analysis. The findings revealed that planning on the objectives of the sessions, topics on research and innovation, diversity of participants, delayed MOOE budget, faculty attendance, and lack of tools for monitoring and evaluation are the challenges encountered by the study participants during SLAC sessions. From these challenges, the participants provided the following suggestions: 1) effective monitoring and evaluation of SLAC, (2) proper and intensive scheduling of SLAC, (3) thorough planning, (4) refinement of topics, and (5) inviting outside resource speakers. Finally, grounding from the themes generated, this study proposed a conceptual model of SLAC with three dimensions, namely: the design, the action implementation, and the monitoring and evaluation, termed COPPEC (Community of Practice-based Planning, Execution, and Control). This study concludes the promising benefits of SLAC, especially its cost-effective means for professional development of teachers, thus, it must be properly implemented provided that challenges are addressed.

**Keywords:** Learning Action Cell, School Learning Action Cell, Thematic Analysis, Professional Development, MBHTE-BARMM

## 1. Introduction

The cliché “no man is an island” is a wisdom that seems to be true in most circumstances, especially in the context of education. Teachers and other practitioners have been emphasizing and promoting collaborative learning or collaborative work, because as the saying goes, “two heads are better than one.” While teachers implement various

group tasks to their students in order to foster collaboration, the same rationale applies to teachers who are ceaseless in enhancing and elevating their mastery of the subject matter and pedagogy for effective teaching. The end-goal of all these is for the students to receive quality education which is largely maneuvered by the classroom teacher.

One of the many ways to enhance the teaching-learning knowledge and skills of the teachers is through engaging in professional development to improve professional performance. According to Lewis (2002 as cited in Mendoza et al., 2017), professional development is the key to educational improvement. One of these is through coaching. Grant (2017) recognized the importance of coaching and considered it as universal practice for improving the professional performance of individuals which could, in effect, be beneficial to the organization. In Japan, one of their efforts to promote professional development among their teachers is their Lesson Study framework. It is a collaborative approach aimed at training and teaching the teachers to plan, present, observe, and evaluate and reflect on classroom lessons (Mendoza, et al., 2017). This Lesson Study was adapted in the Philippines by the Department of Education (DepEd) through the Learning Action Cell (LAC).

In line with the implementation of Republic Act 10533 or the Enhanced Basic Education Act of 2013, the Department of Education (DepEd) issued the policy on the Learning Action Cell (LAC) as a K-12 Basic Education Program School-Based Continuing Professional Development Strategy for the Improvement of Teaching and Learning (DepEd Order # 35 s. 2016). Learning Action Cell (LAC) is a policy that aims to involve and engage teachers in “positive, caring, and safe collaborative learning sessions to solve shared challenges encountered in the school” (Correos & Palar, 2020). This program is facilitated by respective school heads or if there is a designated LAC leader who will then group the teachers to find solution to problems or solve shared challenges such as learners' diversity, content and pedagogy, assessment and reporting, and ICT integration (De Vera & De Borja, 2020; Cabral & Millando, 2019). The LAC is a process of teaching-learning that is considered to be cost-effective continuing professional development (Oakley, King, & Scarparolo, G, 2018) because it is done through teacher collaboration and coaching. The LAC sessions are conducted not only to improve the teachers' knowledge and skills, but also to improve the students' performance inside the classroom as its end-goal or outputs (Binauhan, 2019).

With the belief that no individual or teacher has the expertise of all aspects of epistemological knowledge of teaching and learning, Bajar et al., (2021) noted that combinations of insights and expertise of various teachers can help enrich their knowledge, skill, and competence.

Almost a decade into the implementation of the Learning Action Cells (LACs), there are studies which claim the LAC's effectiveness and impact on the learners. For instance, Pascua (2019) reported that the level of effectiveness of LAC sessions was perceived to be “Highly Effective.” Verbo (2021) also disclosed during the 25th Asian Technology Conference in Mathematics, that there was an increase in the overall performance of the students before and after the LAC.

A number of further studies have been conducted on LAC, which generally depicted a positive impact on teachers' performance, beliefs, and practices. For instance, Culajara (2022) reported that LAC sessions as a tool helped address the instructional and knowledge gaps of the teachers, which then makes the teaching and learning effective. This is confirmed in other studies utilizing action research on LAC as an intervention to test its effect. For instance, the LAC sessions about climate change among elementary teachers showed a positive significant effect on the teachers' level of awareness and knowledge (Adlit, 2022). The teaching ability or teaching practices of the teachers after the conduct of LAC have improved (Verbo, 2019; Cabral & Millando, 2019; Medina et al., 2023) as well as the overall students' performance which showed commendable improvement (Verbo, 2019.).

While there are several studies indicating benefits of LAC, especially the more recent paper of Medina et al. (2023) on the positive impact of LAC session on teachers' beliefs and practices and increases their participation, there are still reported issues and challenges encountered in its implementation and conduct. The problems identified were the prioritization of topics or topics that are based on one's field of specialization rather than general topics (Silva, 2021; De Vera and De Borja, 2020) preparation of LAC materials (Silva, 2021); lack of preparation and

professional development, excessive academic load for the students, and integration of lessons in real-life context (Verbo, 2019); some teachers also failed to identify the relevance of LAC session to their teaching profession (Cabral and Millando, 2019). Furthermore, scheduling, disruption of classes, teachers' availability, LAC Activities, LAC Framework, and Funding (Vega, 2020) were also the challenges deemed by other teachers.

The study of Correos and Paler (2020) depicted that teachers' and even school heads' understanding of the implementation of SLAC is limited. The teachers also reported that they did not see how the school heads are focused on the implementation and monitoring of SLAC in schools. This implies that teachers and school heads appear to have lacking sufficient knowledge, awareness, and full understanding of SLAC and how beneficial it is. It suggests, therefore, that there is a need to get a clear picture of the structure and process of the conduct or implementation of LAC. On the other hand, Vega's (2020) multiple case study on LAC experiences of the teachers revealed that the participants recommended the need for creating a LAC model and development of LAC evaluation to monitor the status of its implementation. It should be noted that although the DepEd policy on LAC explained the theoretical framework as the basis of LAC implementation, the framework did not provide a more specific process for the conduct of LAC sessions.

In addition, few conducted a qualitative, most importantly, none proposed a model or framework that could guide the teachers and school heads in its implementation. With these aforementioned gaps in the literature on SLAC, the purpose of this qualitative study is to assess the School Learning Action Cell (SLAC) in the schools of BARMM. The participants of this study were the school principals from the different participating schools within the BARMM region. The school principals were chosen as the participants as they can provide informed data that are needed to address the research questions of this paper. School principals are the identified leaders of SLAC sessions as stipulated in the DepEd Order no. 35, s. 2016 or the policy on Learning Action Cell (LAC).

The selected school principals provided information based on their experiences with the implementation of SLAC in their respective schools. Hence, this study specifically assessed the different stages of the SLAC, from its design, implementation, monitoring and evaluation stage and with the end-goal of generating a SLAC model that can be used by the region for a more effective implementation of the policy.

## **2. Method**

This study employed qualitative research design to explore the experiences of the participants about a phenomenon of focus. According to Creswell (2007), qualitative study is used to describe the meaning of experiences for several individuals, with a focus on depicting what these participants have in common as they experience a phenomenon. The phenomenon investigated is the teacher coaching and facilitating through school learning action cell and helped explore how the school heads experienced the phenomenon of SLAC and the issues and challenges they had faced.

The participants of this study were the twenty-four (24) school principals, school heads or teacher-in-charge in the selected schools of BARMM. These participants were chosen because as school heads, they are in charge of the implementation in terms of planning, designing, organizing, and conducting SLAC sessions on a school-based level, as well as involved in the monitoring and evaluation of the implementation. The researchers utilized interview, document analysis, and observation as the gathering tools of the study. Interviews are conducted and are chosen due to its ability to go deeply into the understanding and experiences of the participants. The interview questions are developed from the review of literature and are aligned with the research questions as well as the conceptual framework. The interview protocol was the guide for each interview. Guided questions and follow-up probes were also used. Additional clarifying questions were asked within the semi-structured interview format when elaboration from the participant is required (Mertens, 2010). Data was also collected through observations of coaching sessions involving the instructional coach and classroom teachers. The intention of the observations is not for the researchers to gain a complete and thorough insight into the pedagogy of instructional coaching. Rather, the observations are intended for the researchers to use as confirmatory examples of what the instructional coaches have shared in the interviews.

Moreover, document analysis is a systematic procedure for reviewing or evaluating documents—both printed and electronic (computer-based and Internet-transmitted) materials. Documents contained text (words) and images that have been recorded without a researchers' intervention. In this study, documents on the conduct of SLAC sessions in selected elementary schools in BARMM were obtained for analysis. These documents include narrative reports on SLAC, documentation, and/or accomplishment report. This is to validate the information gathered from the interview session.

The researchers also conducted observations with some participants. The researchers chose this due to going deeply into the understanding and experiences of the participants. During the observation, the researchers collected the data and took notes of the happenings during the SLAC session. The intention of the observation is not for the researchers to gain complete and thorough insights into the School Learning Action Cell (SLAC). Rather, the observations are intended for the researchers to use verifiable examples of what School Learning Action Cell (SLAC) as shared by the respondents.

This study followed the qualitative data analysis strategies suggested by Creswell (2007), which include preparing and organizing data, reducing data into themes through coding, and presenting data in non-textual form. The study involved transcribing and bracketing the interviews, developing the coding method, creating themes, writing a composite description, validating the findings with the participants, and creating a graphical representation of the phenomenon. The study aimed to present a model of SLAC based on the participants' experiences.

### **3. Results and Discussion**

#### *3.1. Assessment of the School Learning Action Cell (SLAC)*

##### *3.1.1. Design*

Analysis of the data collected revealed various aspects to which the participants would assess the School Learning Action Cell (SLAC) according to its design. Based on the interview, the participants revealed that school learning action cell sessions begin with planning or action plan, which involves the design of the SLAC sessions. Extracted from the analysis of data, it revealed that SLAC is designed based on the following: (1) purpose of SLAC sessions, (2) designating lecturers, (3) motivating teachers to participate, (4) discussing topics related to school needs, and (5) providing technical assistance.

Firstly, the purpose of conducting a School Learning Action Cell (SLAC) session is crucial, as it serves as the target and direction for the session. The LAC leader must determine the effectiveness of the session by investing in its purpose, identifying the beneficiaries, and outlining how it can be beneficial. By doing so, SLAC members will have a clear understanding of what needs to be accomplished at the end of the session. This provides them with a sense of purpose. According to the transcribed interviews, 9 out of 24 participants emphasized that the purpose of the SLAC should be given top priority as it is the stepping stone towards the success of the session.

This finding highlights the importance of setting goals or objectives for SLAC sessions. The Ministry of Basic, Higher and Technical Education (MBHTE) of BARMM considers this initial stage when conducting sessions. The purpose of the SLAC determines the content of the session, which varies by division. The participants followed the implementation process in the DO No. 35, s. 2016, which involves assessing the teachers' needs and identifying the issues for the LAC session. The leader would create an action plan with the objectives based on the needs. Setting a goal or purpose is crucial for the success of an activity, as it guides and motivates the members (Laranjo, 2016). According to Self-determination Theory, goals influence behavior (Laranjo, 2016). The objectives of a SLAC session allow the participants to have a direction and a goal, which aligns with the framework of LAC as a community of practice that involves collaborative planning.

Secondly, lecturers or guest speakers are important people in the session. These people could enlighten the teacher-participants to re-evaluate themselves on the topic they are actually into. This also encourages critical reflection

among teachers which increases the understanding and knowledge of the topics being discussed. Additionally, 7 out of 24 participants emphasized that the selection of lectures and/or topic should also be identified.

In the observation of SLAC sessions, the researchers discerned that principals were the common SLAC lecturers. In all the observed schools, the principal served as the SLAC leader, facilitator and at the same time lecturer. These principals or school heads discussed various topics and at the same time provided technical support for the successful conduct of their SLAC session. This finding indicates how school principals in BARMM lay their trust in some of their teachers to lead a SLAC session. In addition to them, being the automatic SLAC leader as principals, they also allow their master teachers to lead in order to share their relevant skills and knowledge that could be beneficial to the other teachers.

Looking at how LAC is composed of various members and how peer mentoring is practiced, previous studies showed that teachers are motivated and have improved on their pedagogical skills. For instance, Binahuan (2019) in her study on the LAC implementation in the division of Cavite, it was disclosed that teachers and implementers performed well in their task during LAC session. The same findings were reported by Mendoza et al. (2017) and Culajara (2022) depicting that LAC sessions improved the teachers' knowledge that helped in effective teaching and learning and addressed the knowledge gaps and digital divides. However, it should be noted that this present study did not dwell on the effectiveness or impact of LAC sessions in the BARMM. Rather, this study is focused on assessing the LAC as a policy and how the policy is situated and applied in the region of BARMM.

Thirdly, participation of teachers in a SLAC is a testament that they are willing to adapt to changes and innovation evolving to a continuing professional development. Therefore, 10 out of 24 participants answered that teachers should be motivated to actively participate in the SLAC since the primary goal of the session benefits not only the students but also the teachers. They will have mastery of the topics when it is repeatedly done and thus, learning can be positively anticipated.

This study suggests a positive perception of SLAC sessions among BARMM teachers, evident in their motivation as reported by principals. This enthusiasm aligns with the concept of a growth mindset, where teachers embrace development opportunities to improve their practice and student learning. They view their skills and knowledge as improvable through dedication, learning, and collaboration. This aligns with self-determination theory (Aggouni, 2015), where increased intrinsic motivation stems from social settings fulfilling basic needs. In SLAC sessions, being chosen as a mentor or lecturer offers competence by showcasing expertise, autonomy in planning delivery, and relatedness as a leader and expert. These fulfilled needs contribute to high motivation for participating in SLAC.

Fourthly, Learning Action Cell (LAC) is a continuing school-based session that can be used to introduce new concepts and ideas as keys to look for the grassroots of the existing problems in the school and plan for a better intervention to overcome these pressing problems. Moreover, all or 100% of the participants mentioned discussing topics should be based on school needs. Therefore, planning and identifying relevant topics should be looked into. This study revealed diversity in SLAC topics across MBHTE-BARMM schools, reflecting their holistic approach to professional development. Despite cultural diversity, a common goal of improving personal and professional skills remained prevalent. Notably, teacher and staff autonomy in choosing topics positively impacted them, aligning with studies by Bajar et al. (2021) and Silva (2021). These studies highlight reduced workload, improved pedagogy, and increased teacher efficacy as benefits of SLAC autonomy. While topics varied, Silva (2021) identified areas for additional training, including learner diversity, content and pedagogy, assessment, 21st-century skills integration, and curriculum contextualization.

Finally, to strengthen the school in managing the occurrence of lapses, the technical assistance coming from the LAC leader or other concerned individuals brings so much help leading to the achievement of the school's performance outcomes with the end in view of providing relevant, timely and appropriate results in the future. On the other hand, 18 out of 24 participants answered that in conducting SLAC sessions, leaders or facilitators need to identify the type of technical assistance needed to make the program successful.

The findings on the technical assistance depict that there is an existing collaborative effort among all stakeholders of SLAC in MBHTE-BARMM. Crucially, the Ministry of Education in BARMM also needs to improve the ICT programs or technological assistance given by the Department of Education (DepEd) to its schools. The D.O #35 s. 2016 enumerated the process of implementation such as assessment of needs, prioritization of topics or agenda, formation of LAC, identification of appropriate intervention, and scheduling of meetings. It can be argued and recommended that as far as the BARMM stakeholders are concerned, the “assessment of needs” should not only be limited to the professional or career stage needs of the teachers but also other needs, especially technical needs, of the SLAC stakeholders during sessions. This is the common case among schools in the rural and remote areas who lack the necessary equipment or devices to appropriately conduct and organize SLAC as revealed by the participants.

### 3.1.2. Implementation

The second aspect of how SLAC is being assessed is the implementation part. Based on the qualitative analysis of the data, the categories found that are used to assess the implementation of SLAC are the following: (1) teachers’ participation and collaboration and (2) utilization of professional learning tools.

In the implementation of the SLAC session, the data revealed a positive outcome of the process which is the active participation of the teachers and their collaboration. The capacity of the teachers to participate is based on two reasons: willingness to participate and mandatory participation. Besides, 22 out of 24 participants asserted that the willingness to participate in a planned School Learning Action Cell (SLAC) bring positive outcome because the active participation of the teachers is tantamount to embracing innovation.

The findings suggest that the implementation of SLAC in BARMM is positively embraced by the teachers and could lead to cordial relationships among its members or stakeholders. Good or cordial relationships among teachers tend to foster a productive and efficient working environment. This finding aligns with previous research by Mendoza (2017) and Bajar et al. (2021), highlighting how SLAC sessions promote collaboration, open-mindedness, and commitment among participants.

Furthermore, the collaborative nature of SLAC sessions creates fertile ground for applying Vygotsky's sociocultural theory. As teachers share experiences and challenges, they collectively contribute to each other's Zone of Proximal Development (ZPD). Experienced teachers and invited resource persons can then guide and support less experienced colleagues, fostering a collaborative learning environment.

In essence, the sociocultural theory underscores that learning is not an isolated, individual endeavor but a socially mediated process. The collaborative and participatory nature of SLAC sessions within the BARMM aligns with this perspective, creating a platform for teachers to collectively advance their professional development within a supportive community of practice, regardless of their diverse ethnic background. As teachers actively collaborate, share insights, and collectively problem-solve, they contribute to the dynamic learning process that Vygotsky's theory emphasizes.

On the one hand, it is also crucial to stay up-to-date with the latest learning tools that can be used in the implementation of the School Learning Action Cell (SLAC) to ensure the provision of the best education possible to our learners. Another is almost or 23 out of 24 participants affirmed that utilization of professional learning tools is part SLAC success.

This finding indicates that while the participants reported some technical assistance they needed, nevertheless, it reflected how these school principals in BARMM are resourceful enough to find ways to conduct SLAC despite scarcity of some aspects. It reflects resiliency, commitment and dedication among BARMM education stakeholders. These participants are aware that professional learning tools are equally important in any professional development activities, because not only does it help the lecturer and the participants to have better understanding of the topics but also to monitor and evaluate the SLAC session. Therefore, reiterating what has been mentioned in the previous paragraphs, assessment of needs should not only be conformed with the career stage-related needs

or professional development needs, since these are all related to documents and participations in educational advancement; but rather needs should also be identified with something concrete that is useful and helpful in the attainment of the duties and responsibilities of teachers.

### 3.1.3. Monitoring and Evaluation

Based on the analysis of the data, the categories emerged in the assessment of the monitoring and evaluation of SLAC sessions are the following: (1) Classroom Observation and Post Conference; (2) Improvement of Teaching-Learning Process; (3) Nurtures Professional Development; and (4) Collaboration and Assistantship among Teachers.

First, in providing feedback in the design and implementation of the conduct of the LAC session, observation and/or post conference is vital in ensuring its level of effectiveness and providing an opportunity to assess learning, inform instruction and adjust education plans relevant to the topics being discussed.

This study suggests consistent adherence to monitoring and evaluation guidelines by BARMM principals, demonstrating their commitment to effective SLAC implementation. Unlike findings from Correos and Paler (2020) where teachers perceived a lack of leadership focus on SLAC, the present study highlights principals' informed approach and keen interest in monitoring and evaluation. Notably, some principals even enforce mandatory participation, further emphasizing their dedication to fostering a collaborative learning environment.

Second, the challenge to improve teaching and learning school-wide is a task that is worth noting. The ever-changing environment coupled with constantly moving changes leaves us wondering its continuous alterations; however, the LAC session can be of help in providing relevant interventions and alternatives to better learning. Besides, all participants affirmed that the realization of School Learning Action Cell (SLAC) targets the improvement of teaching-learning process. They mentioned that it could be evaluated with the use of tools that are contextualized.

This finding suggests that SLAC effectively promotes personal and professional development for teachers in BARMM, as well as their learners. School principals reported improvements in teachers' knowledge, skills, and attitudes, although further quantitative data is needed for confirmation. However, the flexible and contextually relevant topics addressed in SLAC sessions resonate with previous studies by Bajar et al. (2021) and Mendoza et al. (2017), highlighting its potential to enhance instructional mastery, teacher efficacy, and teaching-learning practices. This flexible approach allows for authentic solutions to challenges faced by teachers and schools in BARMM.

Third, in today's rapidly evolving professional landscape, success hinges upon our ability to adapt, innovate, and continuously learn. Everyone needs to embrace the mindset of life-long learning to thrive in an ever-changing world. Additionally, almost 23 out of 24 participants emphasized that they nurtured, renewed their commitment and new directions towards professional development through SLAC sessions.

This study suggests that SLAC sessions in BARMM foster a holistic approach to professional development, extending benefits beyond technical skills to encompass personality traits and social-emotional learning. This translates to improved emotion management, communication, and relationship building, especially relevant in the BARMM context. Effective implementation of SLAC can yield significant benefits for its target audience.

The findings align with previous research by Mendoza et al. (2017) highlighting renewed commitment and direction towards professional development fostered by SLAC activities. Similarly, Verbo (2019) reported improvements in content knowledge and teaching ability after LAC implementation, validating the program's positive impact.

Finally, teachers' collaboration provides fellow educators opportunities to meet, share insights, create cohesive plans, and work together effectively. This needs to be given extra mindfulness since it brings success in identifying

educational practices that consistently help in the long run. Twenty-three (23) out of 24 participants asserted that collaboration is apparent especially in the context of not attending the scheduled sessions, therefore, they have to collaborate with the other teachers to be mentored regarding the topics that were discussed.

Confirming what has been mentioned in the previous section, this finding implies that the SLAC session in the context of BARMM appears to be beneficial for the BARMM teachers as it fosters working with colleagues and provides assistance for those who need it. With the Bangsamoro Transition Authority that was established five years ago, it is safe to say that they are still in the adjustment period of transitioning from the debunked Autonomous Region for Muslim Mindanao (ARMM) to BARMM. Not to mention that the region has been hiring new teachers for the past few years, thus, collaborative, and free professional development activities are highly needed for these teachers, specifically the newly hired in the various divisions or provinces in the BARMM.

This emphasis on collaboration resonates with previous research by Bajar et al. (2021) and Mendoza et al. (2017), demonstrating SLAC's potential to promote workplace collaboration, reduce teacher workload, and enhance well-being. Considering the positive impact observed in this study, sustained and expanded SLAC programs offer promising avenues for improving teacher development and educational outcomes in BARMM.

### *3.2. Issues and Challenges Encountered During the School Learning Action Cell (SLAC) Sessions*

#### *3.2.1. Challenges in the Design*

As to the issues and challenges that were identified in designing a SLAC program, the following are the results: (1) objective planning and presentation, (2) diversity of SLAC participants and teaching methods, (3) topics on research and innovation.

An important part of the design of a SLAC program is to list its objectives. In the analysis of the data, it was found that planning the objectives and presentation is one of the challenges encountered by the participants. The common challenges that relate to this aspect are the issue of early planning of a clear objective and discussion of objectives during the SLAC session. Furthermore, on the part of SLAC members, who are the teachers, having clear objectives or purpose of the session is an issue for them, as well as who will explain the objectives of the session. There are also cases in which objectives were not discussed to them according to the participants.

This study highlights the importance of clear objectives in BARMM SLAC sessions. While training in objective presentation might not be necessary, a reminder to carefully plan and present objectives before each session is crucial. The absence of clear objectives can hinder focused collaboration, effective use of development time, and meaningful peer interactions. Clear objectives align teacher efforts, foster collaboration, and ultimately enhance educational quality in BARMM. As Lucas and Corpuz (2020) point out, clear objectives activate participants' prior knowledge, facilitating the learning process. Addressing this aspect aligns with previous research by Cabral and Millando (2019) and Correos and Paler (2020), where teachers emphasized the importance of clearly stated objectives and their impact on learning outcomes.

Moreover, it is worth noting that schools in BARMM are diverse coupled with cultural differences that remain constant. Based on this theme, this shows that teachers are different in pedagogy and that SLAC is imperative to address these differences with the end goal of attaining successful learning outcomes for BARMM learners. Besides, 14 out of 24 participants mentioned that diversity in the school is apparent. This does not mean that teachers with exceptional abilities should be isolated in conducting the sessions, heterogeneous grouping should be adopted to ensure equitable distribution and collaboration among teachers.

Just as how the BARMM teachers have to deal with the diverse students of different needs and interests, learning styles, and of socio-economic and cultural backgrounds, the same scenarios are faced by the SLAC leaders. In addition to these differences, the participants also had to address the individual preference of the teachers in terms of their teaching approaches and teaching methods. It can be said that this is a natural scenario since teachers have different fields of specialization, educational attainment, and experiences.



This study highlights the need to address teacher diversity and preferences in BARMM SLAC sessions for effective policy development. Recognizing and accommodating diverse teaching styles and preferences through flexible action plans, shared strategies, and targeted support are crucial for successful collaboration. Integrating these insights into SLAC policy can enrich the collective knowledge base, improve teaching practices, and potentially serve as a model for DepEd at the national level. Informing BARMM Ministry of Education officials at all levels about these issues can empower them to make informed decisions for improving the LAC framework.

Further, it is unfortunate to note that SLAC sessions conducted in BARMM did not tackle research and it may show that research is not given priority since evaluation is not closely monitored. Additionally, 23 out of 24 participants affirmed that topics on research should be addressed. Some teachers omit research from their sessions because they feel unequipped to discuss it, lacking expertise on the topic.

This study suggests a strong focus on teaching and learning processes in BARMM SLAC sessions, addressing urgent needs for teacher competency improvement and quality education delivery, particularly relevant given the region's low literacy rates and enrollment. This highlights the importance of professional development through SLACs in tackling these challenges. Furthermore, these findings call for potential revisions to the national LAC policy and guidelines (DO 035, s.2016). While the current document recommends topics like learner diversity and curriculum contextualization, it lacks explicit mention of research and innovation. While flexibility in topic selection exists, specific guidance on incorporating cutting-edge approaches could benefit BARMM's unique context. This could involve revising the recommended topics list or providing clearer guidance for school heads and SLAC leaders on incorporating research and innovation elements into their sessions.

### 3.2.2. Challenges in the Implementation

In the implementation of the SLAC program, there are two identified issues and challenges which are the (1) delayed budget release of MOOE and the (2) problem with the faculty attendance.

Regarding challenges in implementing SLAC, participants revealed that the delayed release of the Maintenance and Other Operating Expenses (MOOE) often hampers their ability to conduct sessions effectively. This issue impacts SLAC sessions comprehensively, as some are carried out without necessary technical support. For instance, the allocation of honoraria for external expert speakers becomes unattainable due to budget constraints. Sixteen out of twenty-four participants cited delayed MOOE as a hindrance to session execution. Despite budgetary constraints, some teachers remained committed to conducting SLAC sessions.

This study reveals that while school heads in BARMM demonstrate remarkable commitment to organizing SLAC sessions despite budget limitations, this situation should not be normalized. It presents a compelling argument for BARMM Ministry of Education officials, from regional to division levels, to prioritize timely disbursement of allotted school budgets. The dedication of school heads and teachers deserves prompt encouragement and support through budget allocation. Delays attributed to bureaucratic hurdles should be addressed efficiently. Prolonged delays risk negating the positive impact of collaborative efforts within SLAC sessions, potentially hindering educational progress in the region. This finding contradicts with Reazo (2021), who highlighted budget preparation as a less problematic aspect of LAC implementation. However, the present study underscores the specific challenge of delayed budget release faced by BARMM schools, affecting their ability to effectively utilize allocated funds for SLAC activities.

Furthermore, participants noted the dedication of teachers towards achieving SLAC goals. However, some teachers showed less commitment to participating in SLAC sessions, possibly due to difficulties in adapting to change. Moreover, 19 out of 24 participants highlighted challenges with teacher punctuality in attending SLAC sessions. Occasionally, sessions had to be rescheduled by the LAC leader or facilitators due to incomplete teacher attendance.

This finding identifies lack of commitment and punctuality among BARMM teachers participating in SLAC sessions as a critical concern. This undermines collaboration, hinders idea exchange, and creates disparity in professional development. In a region like BARMM, reliant on collaboration to address unique challenges, these issues can exacerbate existing educational problems. Targeted interventions like professional development programs, incentives, or support systems are crucial to address this challenge. Strengthening policies that encourage and reward active SLAC participation can further create a more effective and inclusive professional development framework. These findings align with previous research by Bajar et al. (2021), Vega (2020), and Reazo (2021) highlighting issues with scheduling, out-of-field teaching, and teacher availability. This underlines the need for context-specific solutions and flexible scheduling to optimize SLAC effectiveness in BARMM.

### 3.2.3. Challenges in the Monitoring and Evaluation

A notable weakness identified is the absence of evaluation tools during the monitoring and evaluation of LAC sessions, which are crucial for fostering educational advancement. Additionally, 22 out of 24 participants highlighted the lack of an evaluation tool for monitoring teachers and/or schools as problematic. Without such tools, it becomes challenging to assess the effectiveness of conducted sessions, identify areas for improvement, and determine overall success.

This study emphasizes the urgent need for a BARMM-specific instructional supervision tool for monitoring and evaluating SLAC sessions. Such a tool is crucial to effectively assess SLAC's impact in a region with unique challenges, priorities, and cultural contexts. Without a tailored tool, there is a risk of overlooking crucial nuances and misjudging the effectiveness of SLAC initiatives for BARMM learners. This can hinder identifying best practices and areas for improvement. This finding aligns with Vega's (2020) study, identifying the lack of an evaluation tool for LAC sessions as a key challenge. Developing and implementing a BARMM-specific tool will facilitate a more accurate assessment of collaborative professional development efforts and their impact on educational outcomes in the region.

## 3.3. *Participants' Suggestions That Can Be Helpful in Designing, Implementing, and Monitoring and Evaluating SLAC Sessions*

### 3.3.1. Effective monitoring and evaluation of SLAC

In most programs of the Department of Education, such as instructional supervision, are subject to effective monitoring and evaluation, SLAC sessions in BARMM are reportedly not closely monitored. Participants noted that SLAC sessions are often viewed merely as a matter of compliance rather than a policy implemented within schools. Additionally, 6 out of 24 participants expressed agreement on the necessity of effective monitoring and evaluation. They argued that without it, SLAC sessions are likely viewed solely as compliance measures, thereby hindering the DepEd's objectives for SLAC implementation.

This finding suggests that while design and implementation of SLAC seem adequate in BARMM, the monitoring and evaluation phase requires significant improvement. School principals identified this as a critical area, highlighting potential shortcomings in assessing program impact and effectiveness. This finding presents a valuable opportunity for the BARMM Ministry of Education. One of the implications of this finding is to focus on evaluation by developing region-specific tools and assessment measures tailored to BARMM's unique educational context. Another one is ensuring policies and practices at the policy-making level harness the full potential of SLAC, leading to informed decision-making and continuous improvement. This aligns with Correos and Paler (2020), who identified a lack of clear evaluation processes for SLAC. While capacity building for teachers was not suggested in this study, intensifying, sustaining, and improving SLAC overall remains crucial.

### 3.3.2. Proper and Intensive Scheduling of SLAC

The LAC is a mandatory policy, and it is then implied in the policy that it should be practiced every afternoon on the last day of the week. Further, 19 out of 24 participants mentioned that the punctuality of the teachers in

attending SLAC can be a challenge. The LAC leader and/or facilitators sometimes reschedule the sessions because of the incomplete number of teachers.

This finding highlights the influence of cultural norms on SLAC implementation in BARMM. The strong family orientation and social obligations among Muslims in BARMM can lead to scheduling conflicts, despite positive attitudes towards SLAC. This aligns with previous research by Vega (2020) and Reazo (2021), identifying scheduling inconsistencies and conflicts with school activities as key challenges. To address these concerns, participants suggest flexible scheduling based on participants' common availability. This can enhance attendance, cooperation, and ultimately, the effectiveness of SLAC as a valuable professional development program for BARMM teachers.

### 3.3.3. Thorough Planning

Ensuring the success of SLAC sessions entails more than just meeting compliance standards. It requires meticulous planning and design aimed at addressing school issues and exploring effective interventions. Successful SLAC sessions should actively engage participants in collaborative discussions to generate alternative solutions. Participants emphasized the importance of thorough planning to enhance SLAC sessions, with 7 out of 24 respondents noting its potential to improve session quality. They emphasized the value of well-planned objectives and technical assistance, advocating for a steady, deliberate approach over rushed implementations.

This finding suggests that ineffective planning or implementation of LAC sessions in BARMM necessitates revising the LAC framework and policy. Convening Ministry of Education officials, superintendents, supervisors, and school heads could facilitate this realignment. The theoretical framework of LAC, outlined in D.O no. 35, s.2016, emphasizes collaborative planning, problem-solving, and action as key elements for teacher development. Previous research like Mendoza et al. (2017) supports this, highlighting how lesson study fosters collaboration and planning skills. However, the current study points to potential shortcomings in planning within BARMM's LAC sessions. While Gumban and Pelones (2021) found overall teacher performance to be satisfactory, including curriculum and planning, the present study identifies opportunities for improvement. Therefore, revisiting the LAC framework and policy through collaborative efforts can enhance planning, leading to more effective professional development experiences for BARMM teachers, aligning with the theoretical foundation of LAC as a community of practice.

### 3.3.4. Refinement of Topics

Several participants proposed the importance of contextualizing topics suggested by the division or region to ensure relevance to the specific needs and situations of schools. Additionally, 12 out of 24 participants recommended refining topics prior to the SLAC sessions. While the DepEd offers suggested topics for delivery, emphasis should be placed on selecting the most pertinent and impactful topics that directly affect and align with the context of the schools.

This finding emphasizes the importance of refining SLAC session topics to address the specific needs and challenges encountered by teachers in BARMM. It aligns with studies by Silva (2021) and De Vera and De Borja (2020), which identified concerns regarding topic prioritization in LAC settings. However, Reazo (2021) found perceived success in topic prioritization, suggesting contextual variations. This difference highlights the necessity of tailoring SLAC topics to the local context. BARMM's unique needs may differ from those of other regions, requiring region-specific considerations during topic selection and implementation. This finding highlights the limitations of universal solutions in collaborative professional development and stresses the need for nuanced approaches that consider local factors and variations across different contexts.

### 3.3.5. Inviting Outside Resource Speakers

Most participants recommended inviting outside speakers with expertise in the topics under discussion, rather than solely relying on school principals or master teachers. These speakers should possess specialized knowledge and

could be sourced from the division office or universities. Additionally, 10 out of 24 participants indicated that inviting speakers could enhance the sessions. The current arrangement of SLAC sessions involves rotating teachers responsible for conducting them.

This finding highlights a potential conflict regarding resource speakers in BARMM SLAC sessions. While participants suggest inviting external speakers for novelty and expertise, this might imply a lack of trust in internal colleagues' ability to deliver valuable knowledge. Trust is crucial for effective learning, suggesting the need for alternative solutions. Furthermore, the cost-effectiveness principle of SLAC outlined in D.O. 035, s.2016 necessitates careful consideration of external speaker invitations. This aligns with Correos and Paler's (2020) recommendation for intensive capacity building for school heads and teachers in conducting and monitoring SLAC. Equipping internal stakeholders with necessary skills could address the need for expertise while adhering to budget constraints.

### 3.4. A Proposed Model of SLAC generated from the Findings of the study

Based on the data gathered, analyzed, and interpreted laboriously, this present paper proposed the following model that is grounded from the findings of the study. Moreover, the previous sections present the results of the assessment and challenges of SLAC in terms of its design, implementation and monitoring and evaluation. Each aspect reveals various themes emerging from the data which depicts the process and structure of SLAC. Hence, these underlying structures entail three essential dimensions of SLAC program of the Department of Education.

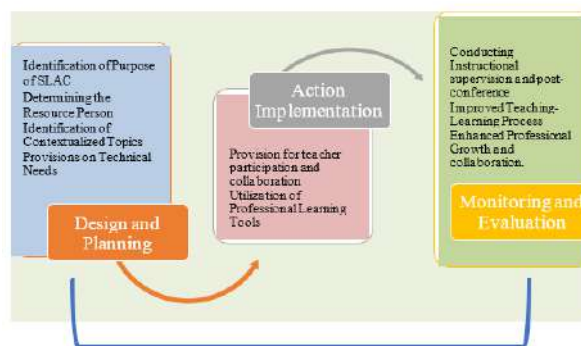


Figure 1: COPPEC Model of School Learning Action Cell

Figure 1 above depicts the proposed conceptual model for School Learning Action Cell (SLAC). This proposed conceptual model named COPPEC, embodies a comprehensive approach to facilitating professional development and enhancing educational outcomes.

COPPEC integrates the principles of Community of Practice (COP) throughout its three phases: design and planning, action implementation, and monitoring and evaluation.

Under the design and planning phase, COPPEC emphasizes the identification of SLAC's purpose or objectives, selection of resource persons, identification of contextualized topics, and provisions for technical assistance. These elements lay the foundation for collaborative learning and knowledge exchange among educators (Silva, 2021; De Vera & De Borja, 2020).

During the action implementation phase, COPPEC underscores the importance of promoting teachers' participation and collaboration, as well as the utilization of professional learning tools. This phase encourages active engagement and peer support among educators, fostering a culture of continuous improvement.

In the monitoring and evaluation phase, COPPEC focuses on instructional supervision, post-conference discussions, and enhancing the teaching-learning process. By prioritizing professional growth and collaboration, this phase ensures that SLAC sessions have a measurable impact on teaching practices and overall educational quality (Reazo, 2021).

Overall, COPPEC recognizes the centrality of the Community of Practice as both the means and the end of SLAC sessions. By promoting collaboration and knowledge sharing among stakeholders, COPPEC aims to create a

sustainable framework for ongoing professional development and educational improvement (Wenger et al., 2002; Semertzaki cited in Hara, 2019).

#### 4. Conclusion

The Learning Action Cell (LAC) as a cost-effective professional development strategy implemented by the Department of Education for all public-school teachers is considered beneficial and promotes collegial professional growth. Based on the findings of this study, it can be said that the implementation of LAC policy through School Learning Action Cell (SLAC) among schools in the BARMM has categorically improved their teachers' teaching and learning process and professional collaboration and ethics. The notion of communities of practice exists during SLAC sessions and those sessions have made some teachers more participative and motivated. Consequently, the school heads suggested a more frequent conduct of SLAC to ensure its impact on the teachers as well as a way to properly conduct monitoring and evaluation after the session. This calls for a more intensive and extensive approach to SLAC sessions which means a thorough and closer monitoring and evaluation and scheduling of the sessions that permits all teachers to actively participate without making excuses. This means either a monthly or quarterly implementation of SLAC.

With the different suggestions proposed by the school heads, the policy makers at the national down to division level necessitate a modification of certain provisions of the DepEd Order. This would ensure that the SLAC program is properly implemented and that its objectives or goals are achieved based on the contextualized needs of each region, division, and/or schools. On the other hand, the model that this study proposed implies a strong need to enhance and modify the existing theoretical framework of LAC and its guide on the implementation process. A LAC model that is more specific, explicit, and details the provisions that need to be addressed in order to successfully implement the program on a school-based level. The policy makers also must pay attention to and prioritize the resources needed by the school for SLAC sessions. Furthermore, while designing and implementation are key stages of the program, instructional supervision during monitoring and evaluation is equally fundamental as it determines the success of the program. Taken together, an effective implementation and monitoring and evaluation of SLAC implies a better academic performance among learners. Therefore, to invest in a teacher's professional development has to be a priority and a necessity.

Generally, this study not only advances the understanding of SLAC in the MBHTE - BARMM region but also provides actionable insights that can positively impact teaching practices, professional development, and educational policies. This holistic contribution has the potential to enhance the overall education landscape in the BARMM region and may serve as a model for other regions facing similar challenges.

Meanwhile, the model of SLAC generated from the findings of this study proposes a more specific means to assess SLAC sessions or implementation among schools in the Department of Education. This model, termed COPPEC (Community of Practice-based Planning, Execution, and Control), clearly describes the three phases of conducting SLAC, which begin from designing and planning, action implementation, and monitoring and evaluation. In each phase are the areas that SLAC leaders or education officials can measure or assess the success of the policy. This is in contrast to the LAC framework presented in the DepEd order, in which the latter is too general and lacks a clear guide and directions in conducting a professional development activity like SLAC. Therefore, this model can be proposed and submitted to the Ministry of Education in BARMM to inform them of this policy assessment that can be beneficial to all the education stakeholders, most especially, to the learners.

Finally, with the claim of this paper of a model that can be proposed for SLAC, further studies need to be conducted to corroborate the findings of this paper. Moreover, a survey questionnaire can be developed, pilot-tested, and undergo statistical analysis for its reliability and validity; and then be utilized to supplement the claims of the researchers. With the limitation of this paper, more studies should be conducted to extend this study or validate its findings.

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# The Experiences of the School Principals on the Implementation of the School Improvement Plan (SIP) in Lanao Del Sur, Philippines

Norfaesha A. Balindong<sup>1</sup>, Minerva-Saminah M. Naga<sup>2</sup>, Wardah D. Guimba<sup>3</sup>, Lotis B. Daguisonan<sup>4</sup>

<sup>1,2,3,4</sup>Department of Graduate Education, College of Education, Mindanao State University-Main Campus, Marawi City, Lanao del Sur, Philippines

Correspondence: Norfaesha A. Balindong. Email: norfaeshabalindong@gmail.com

## Abstract

This qualitative study addressed a significant research gap in understanding the experiences of school principals in Lanao del Sur, Philippines as they navigate the implementation of the SIP (School Improvement Plan). Employing a purposive selection, the study engaged twenty-nine (29) school principals in an interview to unravel major findings in three key areas. Firstly, participants' experiences unveiled the importance of strategic governance for sustainable growth, enhanced education excellence, strategic self-assessment, and effective resource management, including considerations for educational capacity and sustainability. Secondly, the facilitation of the school improvement process involves stakeholder engagement, collaborative support and development, and addressing challenges to achieve excellence. Thirdly, participants offered insights into enhancing SIP implementation, emphasizing strategic excellence, educational empowerment, and safety and sustainability. Based on these findings, the study proposes the PrinciPulse SIP Implementation Model, an eight-cluster framework encompassing key aspects like leadership, academics, assessment, resources, capacity building, stakeholder engagement, support systems, and comprehensive planning. This dynamic framework empowers principals to proactively guide SIP implementation, fostering a culture of continuous improvement, collaboration, and adaptability in Lanao del Sur's educational landscape.

**Keywords:** School Improvement Plan, School Principal, Experiences, SIP Implementation Model

## 1. Introduction

One of the determiners for a successful organization or institution or implementation of any educational program is to have a plan for its improvement. The education sector in the Philippines has long been on a mission to implement policies and programs that would benefit learners and improve the literacy rate of Filipino learners. A significant policy being implemented by the Department of Education (DepEd) is the school improvement plan.



The School Improvement Plan or SIP is a DepEd policy that guides stakeholders on the specific intervention that schools can implement. It is evidence-based and aligns with the principles of learner-centered. The interventions are participated in by the students, teachers, community members, and other stakeholders, and typically run within a period of three (3) consecutive school years. The SIP is created with the hope of improving three significant key result areas in basic education: access, quality, and governance. Central to the SIP is the School-Based Management (SBM) which is prepared by the School-Community Planning Team (SPT) as the basis for the school's annual implementation plan.

The ultimate objective of the school improvement process is to achieve the desired learning outcomes by enhancing the way curriculum is delivered by competent, committed, and caring teachers by creating a safe and nurturing environment for learning, and by increasing the stakeholders' participation in the entire school improvement process. It also aims to help school heads, teachers, parents, and other stakeholders in the school community to participate in a continuous improvement process by identifying potential barriers to improvement and by finding ways to move the school from where it is now to a condition in which students can achieve their highest potential.

The process of SIP primarily requires constant analysis of school needs, planning and implementing appropriate actions, and monitoring and evaluating results and outcomes. It also involves comparing existing school practices with those of others and obtaining information about best practices to raise standards and ultimately improve school performance. The learner as the focus of the school improvement process reinforces the child-centered and child-rights-based education which is emphasized in the Convention on the Rights of the Child: "Education needs to address the development of the child to his or her fullest potential and promote respect for human rights, the child's own culture and the natural environment and to promote values of understanding, peace, tolerance, equality, and friendship. In other words, education must not be limited to the basic academic skills of writing, reading, mathematics and science" (DepEd Memorandum No. 386, s. 2009).

In light of the SIP issue, there have been reports that many educators question the efficacy of school improvement plans. According to a RAND survey, nearly half of teachers and 67% of principals believe school reform goals affect teaching methods. In addition, 70% of teachers and 81% of administrators agreed that school development plans improved schools over five years (Doss et al., 2020). The Basic Education Sector Reform Agenda (BESRA) is being implemented by the Department of Education (DepEd) following the Governance of Basic Education Act of 2001 (R.A. 9155), which mandates the enforcement of shared governance. The SIP is required by the same Act (Article 7, Section e, paragraph 4) as a method to supplement School-Based Management (SBM).

The implementation of the SIP requires a collaborative effort among the school principals, teachers, School-Community Planning Team (SPT), project team members, and other stakeholders. With proper planning and constant monitoring of the School Improvement Plan implementation, schools' performance could improve (Abalorio, 2022). Despite the claim of Abalorio (2022), Guzman (2022) argued that the large extent of stakeholders' involvement in the SIP, still may not guarantee a very high school performance.

The study gap from prior studies revealed a lack of comprehensive understanding of the elements that impede or limit the efficiency of SIP implementation, despite coordinated efforts by school administrators, teachers, SPT, project team members, and other stakeholders. Existing research, as cited by Abalorio (2022) and Guzman (2022), recognizes the importance of collaboration and monitoring in SIP implementation, but there appears to be a gap in understanding why, despite such collaborative efforts, there may still be difficulties in achieving very high school performance. In the context of the province of Lanao del Sur, the researchers have not found yet a published related study that assessed the performance of the SIP implementation, which led the researchers to find out the experiences of the school principals in the province. This could serve as a stepping stone for future researchers to assess the performance of the school principals on the implementation of the SIP.

Moreover, the SIP goes beyond administrative considerations, as highlighted by DuFour and Marzano (2011). They emphasized the crucial role of effective instructional leadership in the school improvement process. Simultaneously, fostering leadership capacity within the school is equally vital, providing districts with the assurance of a plentiful supply of potential leaders (Gray & Streshly, 2010). Administrative mentors offer teachers

real-world learning opportunities in a secure environment, guided by experienced professionals in the field (Gray & Streshly, 2010). Research, including studies by Leithwood et al. (2004) and Marzano et al. (2005), reveals the significant impact principals have on faculty and academic success. Moreover, a quarter of academic success is directly linked to the instructional leadership of the school, influencing the effectiveness of the faculty (Louis, Leithwood, Wahlstrom, & Anderson, 2010). This impact is further heightened when administrators actively cultivate the leadership capacity of teachers (Ikemoto et al., 2012).

This study addresses the significant research gap by investigating the experiences of the school principals on the implementation of the School Improvement Plan (SIP) in Lanao del Sur. Despite the recognized importance of collaboration and monitoring in existing literature, there is a dearth of studies within the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM), particularly in Lanao del Sur. The researchers asserts that the BARMM context offers an opportune site for the Ministry of Basic, Higher, and Technical Education (MBHTE-BARMM) and the Department of Education (DepEd). Motivated by a commitment to enhance the quality of education services in the community and the broader field, the study aims to investigate the SIP implementation, and how it is facilitated, and formulate recommendations to improve the educational process in Lanao del Sur.

## 2. Method

This study utilized the qualitative research design to explore the experiences of participants grounded on the interview conducted. The qualitative research method is appropriate for this study because it aims to explore the experiences of school principals regarding implementing their school improvement plan. Creswell (1998) points out that the essence of qualitative study is “the central underlying meaning of the research participant’s experience.” Leedy and Omrod (2001) stress that the purpose of qualitative study is to understand an experience from the research participant’s point of view. Thus, the focus on the research participant is more pronounced in this kind of qualitative research.

This study took place in public schools across three divisions in Lanao del Sur: Lanao del Sur I, Lanao del Sur II, and the Marawi City Division in the Philippines. Among the public schools in Lanao del Sur school divisions, the participants of this study, which are the school principals, were purposively selected. The participants of this study consisted of a sample of twenty-nine (29) public school principals out of the total population of school principals in Lanao del Sur Schools Divisions who were asked to share their experiences on the implementation of the school improvement plan. According to Creswell (2007), in qualitative studies, it is recommended to interview 5 to 25 individuals who have experienced the phenomenon being studied, this approach helps establish the legitimacy of the study.

The sampling procedure of this study employed a purposive sampling technique, specifically targeting school principals in Lanao del Sur who have direct experience with the implementation of School Improvement Plans (SIP). Purposive sampling is chosen due to the specific focus on individuals who possess the relevant knowledge and firsthand experiences related to the research topic. The selection criteria included school principals who have actively participated in the development, implementation, and evaluation of SIPs within their respective schools. This targeted approach aims to gather in-depth insights and rich qualitative data from participants who can provide nuanced perspectives on the challenges, successes, and overall experiences associated with SIP implementation in the context of Lanao del Sur.

The study utilized thematic analysis to examine the qualitative data. According to Braun and Clarke (2006) as cited in Kiger and Varpio (2020), thematic analysis is a qualitative data analysis method that identifies, analyzes, and reports on repeating patterns within a data collection. This strategy entails explaining and evaluating the data while selecting codes and creating themes.

## 3. Results and Discussion

### 3.1. Experiences of the School Principals on the Implementation of the School Improvement Plan

### 3.1.1. Strategic Governance for Sustainable Growth

Effective implementation of a School Improvement Plan (SIP) is a critical component of strategic governance for sustainable growth in educational institutions. School principals play an important role in the formulation and implementation of SIPs. They regard them as necessary roadmaps for the improvement of their institutions. The opinions voiced by school administrators underline the importance of SIPs in identifying areas for growth, measuring accomplishments, and building a thorough grasp of the institution's strengths and limitations. This study investigated school principals' experiences with SIP implementation, including their opinions on the obstacles, successes, and overall influence of SIPs in developing strategic governance for sustainable growth.

Of the 29 school principals interviewed, 15 emphasized the importance of the School Improvement Plan (SIP) in educational administration. These administrators highlighted the importance of the SIP, regarding it as an essential component of their strategic governance for sustainable growth. Their united sentiment indicated that schools without a well-structured SIP may have difficulties in accomplishing goals and encouraging development. The constant theme among these 15 principals is that the SIP is more than a theoretical concept, emphasizing its practical value as a tangible roadmap or plan for the school. This common perspective positions the SIP as an important tool for finding areas for improvement, reviewing completed initiatives, and assessing strengths and weaknesses. Furthermore, the recognition of the SIP as a comprehensive guide that includes factors such as access, quality, and governance demonstrate a holistic approach to improvement planning shared by a sizable proportion of the questioned school leaders.

The findings revealed a common mode among these administrators, emphasizing the SIP's significance not only in problem resolution but also in facilitating a comprehensive view of an institution's strengths and weaknesses. Collectively, these perspectives highlighted the SIP's diverse role in promoting strategic governance for sustainable growth inside educational institutions.

The perspectives of school principals are consistent with the broader educational framework, highlighting the critical role of the School Improvement Plan (SIP) in the context of strategic governance for sustainable growth. The success of planning and implementation, as noted by Coscos (2016), is critical in providing basic education services. This achievement is critical for accomplishing Coscos' three core components: ensuring access to complete basic education, preparing graduates for further education and the world of work, and promoting effective, transparent, and collaborative governance in basic education.

### 3.1.2. Enhancing Education Excellence

Among the 29 school principals who took part in the study, 13 shared common experiences that shed light on the problems experienced during the implementation of the SIP, which had the overriding theme of enhancing education excellence.

The initial idealism expressed by some participants aligns with the high expectations for academic programs, but the tremendous hurdles encountered during the implementation emphasize the necessity for nuanced strategies tailored to the province's distinguished condition. Furthermore, the emphasis on budget management issues and the importance of collaboration from co-teachers and local government units (LGUs) highlights resource-related complexities that may be especially prominent in Lanao del Sur.

Furthermore, the mention of community cooperation concerns highlighted the need for clear communication in building collaboration, which is critical for successful SIP implementation in Lanao del Sur's unique socio-cultural milieu. Addressing these issues and promoting stakeholder engagement becomes crucial in reaching the province's overarching aim of education excellence, demanding context-specific interventions and strategies for sustainable growth.

### 3.1.3. Strategic Self-Assessment

Among the 29 school principals interviewed, six principals shared common experiences regarding the challenges faced in implementing the SIP under this theme. The stories they shared collectively highlighted the difficulty in fully realizing the plans outlined in the SIP due to various impediments.

The experiences of school principals in Lanao del Sur in implementing the School Improvement Plan (SIP) highlighted common challenges, as reported by six out of 29 principals interviewed. These constraints hindered the full realization of SIP objectives, shedding light on the formidable task of strategic self-assessment within the context of school improvement plans. This finding aligns with the conclusions drawn from a related quantitative study conducted by McBrayer et al. (2020), which explored instructional leadership practices and their influence on school leaders' self-efficacy. The research delved into various strategies aimed at enhancing school performance, such as monitoring teacher effectiveness and analyzing student learning outcomes. This becomes particularly significant when a school aims for greater transparency regarding its performance. McBrayer et al. (2020) emphasized the importance of bolstering leadership confidence to address challenges effectively and make substantial strides toward improvement in schools.

### 3.1.4. Resource Management

Among the 29 responses from school principals, four unique voices converged on a shared concern, underlining the critical role of financial resources in implementing the SIP under the resource management matter. The school principals emphasized the difficulty of obtaining support from the local government, pointing out the insufficient MOOE allocation for the various schools.

The experiences of school principals indicated the complex problems associated with resource management during the implementation of the SIP. They stressed the important link between projects and financial resources, expressing dissatisfaction with the lack of support from the local government and insufficient MOOE for necessary school renovations. The school principals complained about the budget shortage, with the majority of expenses covered by the school itself, limiting intended improvements. Other participants provide a more nuanced perspective, acknowledging the problem of being unable to undertake programs without adequate financial resources. Despite these issues, participants believe that SIP's strength lies in offering a framework for evaluating plan completion and creating transparency about successful implementation. This collective narrative emphasized the critical role of financial resources in achieving educational changes, as well as the strategic advantage SIP provided in evaluating the results of these efforts.

Daca and Pacadaljen (2020) corroborate the firsthand experiences of the participants, emphasizing the pivotal role of effective resource management in implementing the School Improvement Plan (SIP). Their study highlights the significant strides participants made towards their objectives by adeptly allocating resources, thereby holding schools accountable for their performance. Emphasizing teamwork between schools and communities, the research underscores the importance of collaboration in fostering opportunities and ensuring the success of diverse initiatives. To optimize SIP implementation, the study suggests establishing a committee tasked with organizing the plan and devising strategic approaches to engage stakeholders in providing financial support. However, participants encountered challenges due to inadequate support from local government and funding sources. Recognizing the critical role of financial resources in school improvement, the study emphasizes the SIP's role as a guiding framework to monitor progress, akin to maintaining balance in resource allocation.

### 3.1.5. Educational Capacity and Sustainability

School principals' accounts portrayed the numerous obstacles and strategic approaches connected to educational capacity and sustainability as they implemented the School Improvement Plan (SIP). The administrators highlighted the challenges of maintaining student enrollment due to economic issues, as parents in the province frequently rely on their children for a living, contributing to high dropout rates and early marriages. They also highlighted the difficulties of minimum-age students in reading, which were aggravated by the obstacles of distant

learning during the COVID-19 pandemic. In response to these problems, one of the participants implemented the unique technique of Parent-Learner Coordinators (PLC), who are elected parents who actively participate in child mapping, reaching out to problematic students, and coordinating with parents. This collective narrative emphasized the critical role of educational leaders in navigating diverse socioeconomic circumstances, resolving educational gaps, and developing sustainable strategies for academic success.

This study highlights the importance of piloting solutions before full implementation within the SIP's "Act" phase, aligning with Enago Academy's (2020) emphasis on small-scale testing. This allows for refining solutions like Parent-Learner Coordinators before wider adoption, ensuring their effectiveness and alignment with best practices for educational improvement. The findings' implications for Lanao del Sur included an awareness of the need for focused interventions that address economic barriers, use innovative ways, and actively engage the community, particularly parents, to improve educational capacity and sustainability. Policymakers and educational leaders should examine context-specific methods to address difficulties and promote a resilient and sustainable educational environment in the province.

### *3.2. Facilitating the School Improvement Process*

#### *3.2.1. Stakeholder Engagement and Collaboration*

The experiences given by principals shed light on the critical issue of stakeholder engagement and collaboration in facilitating the school improvement process. The principals' declaration of stakeholder cooperation indicates a good collaborative atmosphere, highlighting the shared commitment of many organizations involved in the school improvement process. They also provided a practical viewpoint, emphasizing the importance of good time management by school leaders in guaranteeing stakeholder participation and demonstrating adaptation even when scheduling is not optimal. Other participants emphasized the importance of personal engagement in planning and executing projects, as well as principals' proactive approach to coordinating orientations during class openings. These accounts highlighted the critical importance of stakeholder involvement, strategic communication, and proactive leadership in effectively navigating the challenges of school improvement process implementation and cultivating an environment of collaboration within educational institutions.

This study aligns with previous research highlighting the complexities of stakeholder involvement in School Improvement Plans (SIPs) and their relationship to school performance. Guzman (2022) found high stakeholder involvement across all SIP stages, yet significant performance variations and no correlation between involvement and overall performance were observed. Similarly, Nicdao et al. (2019) noted diverse practices across schools reflecting high stakeholder engagement, suggesting context-specific approaches.

#### *3.2.2. Support and Development*

The school principals' experiences shed light on the essential theme of support and development in facilitating the school improvement process. The participants' repeating comments highlighted the widespread recognition among school leaders of the critical importance of support, development, and inclusive stakeholder involvement in the school improvement process. Principals such as P5 stressed some instructors' initial reticence during seminars and the significance of encouraging them to pursue higher education for future rewards. P17 emphasized the importance of SLAC sessions in identifying teachers' needs and weaknesses for targeted professional learning, resulting in a more personalized approach to growth. Furthermore, P18 acknowledged the difficulties in empowering teachers despite instruction and support, acknowledging the individual disparities in reactions. Furthermore, P21 highlighted the difficult issue of acquiring data that is consistent with barangay office information, highlighting the importance of incorporating all sectors and stakeholders in successful SIP implementation. This collective insight emphasized the diverse nature of supporting and developing educators, highlighting the complex relationships involved in encouraging growth within a school community.

Despite global efforts towards universal education, barriers persist for girls, indigenous populations, and disadvantaged communities. Initiatives like Education for All aim to address these disparities in low-income

countries (Hanshek & Woessmann, 2007). These findings emphasize the need for specialized support, ongoing professional development, and inclusive collaboration to navigate Lanao del Sur's unique educational landscape.

### 3.2.3. Addressing Challenges and Constraints in Pursuit of Educational Excellence

The replies of 11 out of 29 school principals provided insight on the issue of "addressing challenges and constraints in pursuit of educational excellence" while facilitating the school improvement process. For example, P3 addressed the difficulty of implementing numerous projects due to the school's private property status, highlighting the difficulties in securing unanimous support for external efforts. For example, P20 highlighted the complex task of managing multiple programs and activities, emphasizing the importance of effective coordination. Furthermore, P24 implemented a proactive strategy through orientation and planning sessions, whereas P28 stressed a collaborative decision-making process to handle challenges, demonstrating a team-oriented approach. These shared experiences highlighted the common obstacles faced by school leaders, as well as the many tactics used to overcome limits in their ongoing quest for educational excellence.

This study, aligned with Stoll and Fink (1996) and Hussen and Postlwaite (2004), highlights the complex challenges faced by school leaders in their pursuit of educational excellence through school improvement plans (SIPs). School principals noted unique challenges like navigating external initiatives due to private property status and managing concurrent applications, reflecting the need for adaptability and coordination. However, proactive strategies like orientation meetings and collaborative decision-making were employed to address these complexities. These actions emphasized fairness, collective input, and a team-oriented approach to problem-solving. These findings underscore the inherent complexities of SIPs and the diverse challenges that arise based on a school's unique context. The study emphasizes the importance of adaptation, teamwork, and systematic planning as key strategies for successfully navigating these hurdles and achieving educational excellence.

## 3.3. *Suggestions to Enhance the School Improvement Plan (SIP) Implementation Process*

### 3.3.1. Strategic Excellence

The majority of school principals, 21 out of 29, agreed on the theme of strategic excellence in enhancing the SIP implementation process. For example, P5 underlined the necessity of doubling attention and proactive planning, pushing for contingency measures such as Plan B and Plan C to guarantee that SIP objectives are met. P7 broadened the strategic approach by suggesting further training for Barangay Chairmen, acknowledging their responsibility not just in providing financial support but also in protecting the school from security risks. Similarly, P23 emphasized the collaboration aspect, highlighting the notion of "two is better than one" and the importance of critical planning that takes into account both the school's immediate and future needs. This collective insight highlighted school principals' consensus on the importance of strategic excellence in SIP implementation, emphasizing adaptability, collaboration, and proactive planning as critical components of a strong school improvement process.

This finding aligns with Meza and Springfield (1998) regarding the importance of collaboration in crafting School Improvement Plans (SIPs). They advocate for combining self-studies with external expert input to develop accessible strategies and adapt plans to each school's context. This collaborative approach resonates with the "collective strategic attitude" of Lanao del Sur's principals, who emphasize shared commitment from diverse stakeholders for successful school transformation.

### 3.3.2. Educational Empowerment

Many, or 11 out of 29 school principals, suggested ways to improve the SIP implementation process by focusing on educational empowerment. The principals stressed the vital need for teacher assistance, citing issues such as insufficient staffing and infrastructure that prevent effective implementation. They also called for teacher involvement from the start of SIP development, claiming that their contributions during brainstorming sessions increase enthusiasm and cooperation. Meanwhile, they emphasized the collaborative character of SIP

implementation, emphasizing the significance of engagement from all stakeholders, notably teachers, who serve as the key implementers.

Furthermore, the school principals made suggestions for educational empowerment at the school level, highlighting the significance of a thorough understanding of SIP for its implementation. These findings highlighted the critical importance of educational empowerment, collaborative engagement, and informed participation in promoting effective SIP implementation in the educational setting.

### 3.3.3. Safety and Sustainability

Four participants of the study underlined the importance of "safety and sustainability" in the context of the SIP implementation process. The principals expressed the urgent need for safety measures to protect the school from damage caused by external sources. They indicated efforts to engage with local officials, such as the Peace Order Council and DILG, in the pursuit of improved security, but frustrations arose owing to organizational barriers. Furthermore, some of them highlighted broader sustainability difficulties, such as old infrastructure, a lack of teachers and resources, and the reoccurring issue of flooding, underscoring the complex nature of concerns. Collectively, these responses highlight the critical need for comprehensive programs to address safety and sustainability issues, reflecting common challenges experienced by principals across the province.

This study aligns with Hopkins (2004) and the National School Climate Center (NSCC) in highlighting the importance of a positive school climate for student learning and engagement. However, the experiences of school principals in Lanao del Sur reveal unique challenges that necessitate context-specific solutions for effective School Improvement Plan (SIP) implementation. The need for targeted safety measures like infrastructure protection reflects the vulnerability of school facilities, suggesting a requirement for localized solutions beyond generic plans. Additionally, concerns about navigating local regulations point towards the need for smoother cooperation and more efficient processes between schools and governing bodies.

## 3.4. Recommendations from the Experiences of the School Principals

### 3.4.1. Comprehensive SIP Development and Implementation

Among Lanao del Sur's school principals, 10 out of 29 shared common recommendations centered on the theme of "comprehensive SIP development and implementation." Notably, P3's perspective shed light on the challenges associated with child mapping, proposing its removal to reduce burdens. P17 emphasized the need to examine written projects for reliability and feasibility, as well as taking into account each school's specific needs and problems. Furthermore, P22 stressed the importance of conducting rigorous checks to verify SIP implementation, underlining a common issue for refining and adapting the SIP process to ensure its effectiveness.

This study confirms that School Improvement Plans act as selective instruments, prioritizing urgent needs while considering future aspirations. Nico et al. (2010) support this view, highlighting SIPs' role in setting current priorities, planning for the future, and monitoring student progress. Grounded in comprehensive needs assessments, SIPs enable schools to cater to diverse student, teacher, and parent needs.

Supporting this, the DepEd SBM Manual (2002) emphasizes the significance of thorough needs assessments involving various stakeholders. This collaborative approach, encompassing school administrators, teachers, students, parents, local governments, and NGOs, forms the foundation for SIPs. As comprehensive overviews, SIPs define key areas for improvement and resource allocation over five years, demonstrating a shared commitment to quality education delivery.

However, recommendations from school principals in Lanao del Sur highlight the challenges and complexities requiring context-specific solutions. Additionally, their call for rigorous SIP implementation checks underscores the importance of accountability. Collectively, these recommendations suggest that successful SIPs in Lanao del Sur require flexibility, context-specific tailoring, and robust accountability mechanisms that address the province's

unique educational challenges. This ensures SIPs are not only feasible but also responsive to the diverse educational landscape, ultimately driving long-term, impactful reforms in the school system.

#### 3.4.2. Collaborative Engagement and Resource Management

The experiences that emerged of school principals in Lanao del Sur highlighted a recurring theme of collaborative engagement and resource management, with 9 of 29 participants sharing similar perspectives. The principals stressed the need for shared responsibility, teamwork, and collaboration, especially in managing a school with over 2000 learners. This opinion was shared by other principals, who acknowledged an increase in Maintenance and Other Operating Expenses (MOOE) but raised worries about a perceived lack of resources when implementing comprehensive plans. Furthermore, the financial factor emphasizes personal contributions to various educational expenses, highlighting a common issue in resource management. These shared responses emphasized the importance of collaborative involvement and effective resource allocation in the context of SIP implementation in the province.

This study aligns with Abalorio's (2022) findings on successful SIP implementation in Lanao del Norte, emphasizing collaboration among school leaders, teachers, and stakeholders. His research highlights the importance of planning and monitoring for improved school performance.

#### 3.4.3. Professional Growth and Development

Fourteen out of 29 participants, expressed similar insights. For example, P9's emphasis on having regionally assigned teachers aligns with the value of community connections for professional development. Meanwhile, P10 advised limiting fund utilization, highlighting a shared concern among participants and calling for enhanced SIP budget allocation. Furthermore, P25 emphasized persistent commitment and leading by example, which was echoed by a sizable proportion of the participants, underlining the long-term significance of effective leadership practices in their professional development. These common recommendations underlined the universal need for teacher localization initiatives, more financial support, and sustained leadership practices to promote professional growth and development among Lanao del Sur school principals.

This study aligns with Deming's and Knowles' theories on effective professional development, emphasizing job-embedded approaches tailored to teachers' needs and context. This aligns with school principals' recommendations, suggesting its potential to improve teacher effectiveness and student achievement (Knowles, 1980).

This study on School Improvement Plans (SIPs) in Lanao del Sur aligns with Anebo's (2019) research on leadership challenges, highlighting shared needs such as effective leadership, financial support, and community involvement. This finding suggests building relationships with stakeholders for a supportive environment, addressing resource limitations, and ensuring sustainability and effectiveness. By addressing these points, Lanao del Sur can foster more effective SIPs and enhance the professional growth of its school leaders.

#### 3.4.4. Community Involvement and Support

The experiences that emerged and recommendations from a subgroup of school principals, comprising four of the 29 participants, focused on the issue of community involvement and support. For example, P1 stressed the importance of appreciating the work of individuals within the school community as a means of improving. P7 fought for a policy that required Barangay Chairmen to participate in the development of School Improvement Plans (SIPs), emphasizing the importance of local leaders in the planning process. Furthermore, P25 gave a perspective on maintaining positive relationships with instructors by appreciating and supporting them, emphasizing the importance of enthusiasm in creating a conducive learning atmosphere. While these responses may represent a small subset of the participants, they all underlined the importance of community engagement and supportive policies in the context of SIP implementation in Lanao del Sur.



Thus, these findings emphasized the importance of community engagement, supportive policies, and a culture of appreciation in improving the entire educational experience in Lanao del Sur. Nicdao et al. (2019) supported these findings by claiming that stakeholders usually understood the SIP as a process, with practices exhibiting high to very high levels of stakeholder involvement. The study highlighted numerous practices used during different stages of SIP, emphasizing the significance of engaging stakeholders. Furthermore, Abalorio (2022) highlights common themes in studies on school improvement plan implementation, such as motivation to improve skills, collaboration with stakeholders, implementation challenges, the role of guidance from education officials, and faith in achieving desired outcomes.

#### 3.4.5. Data-Informed Decision Making

Seven of the 29 participants agreed on the theme of data-informed decision-making. The principals stressed the necessity of being directed on long-term school objectives, and they raised concern over the lack of recent NAT (National Achievement Test) results and other performance indicators affecting the SIP. Other principals pushed for simplifying the creation of SIPs, with an emphasis on goals and objectives as key components. This contrasts with P19, which reported positive improvements in SIP enhancement, such as the elimination of unsuitable features and the implementation of user-friendly templates. These implies a common need among Lanao del Sur school administrators for greater data availability, streamlined SIP development, and improved guidance to assist successful decision-making.

The findings suggest that simply increasing resource allocations will not necessarily lead to an improvement in the quality of education. This is supported by evidence from various international learning tests, including TIMSS, PIRLS, and PISA, which have shown that students from developing countries often struggle with their studies, particularly in the case of the Philippines.

Hanushek and Woessmann (2007) contend that institutional reforms are critical to achieving equity and boosting educational quality. Furthermore, Kochan et al. (2001) underline the value of process data in understanding and improving school performance. According to Upadhyaya et al. (2005), social auditing is an effective approach for ensuring transparency and evaluation of educational activities. Eliminating fear, as proposed by Deming (2000), is another critical component of fostering a learning culture and effective transformation within educational organizations. Implementing the aforementioned recommendations can help Lanao del Sur's educational system become more effective, responsive, and streamlined, encouraging data-driven decision-making and eventually improving the province's quality of education.

#### 3.4.6. External Collaboration and Policy Compliance

The recommendations based on school principals' experiences underscored the need to cultivate healthy external relationships and adhere to policies. This is supported by 13 of the 29 principals. For example, P4 emphasized the necessity of maintaining positive connections, particularly with Local Government Units (LGUs), which are critical external collaborators. P13 stressed the need to seek donors to sustain initiatives and improve activities beyond the limits of the school budget, indicating a reoccurring issue among participants. Furthermore, P28 emphasized the need for adaptation in the field and praised the division office's close monitoring, emphasizing the need for policy compliance. Collectively, these responses demonstrated the widespread acknowledgment among Lanao del Sur school principals of the critical importance of external collaboration and policy adherence in effective school management.

The findings highlighted the importance of external collaboration and policy adherence as fundamental components of effective school leadership in Lanao del Sur. This aligns with Deming's (2000) focus on proactive process improvement over reactive inspections. Professional development, clear protocols, and stakeholder involvement ensure quality from the start, minimizing the need for inspections. Also, distributed leadership empowers teachers through collaborative structures like PLCs. These allow them to monitor student outcomes and adjust curriculum for individual success. This fosters professional engagement and excellence, unlike top-down approaches that often lead to compliance without innovation (Millitello et al., 2009).

#### 3.4.7. Safety and Technological Advancements

The findings highlighted common concerns among several principals or 5 out of 29 participants. The principals underscored the need for a skilled nurse in each school, as well as the value of a registered nurse in improving health management. Some principals express periodic concern about the impact of election-related activities on school infrastructure and demand reimbursement from the LGU for damages sustained during elections. Other principals proposed simplifying the School Improvement Plan (SIP) process and implementing various tools that align with the common mode of streamlining administrative procedures. Furthermore, the widespread lack of understanding and readiness for SPED revealed a common worry about the need for improved preparation and knowledge dissemination in schools, particularly in SPED. These findings highlighted Lanao del Sur school principals' common concerns and ambitions in terms of technological integration, safety measures, and administrative efficiency.

According to Upadhyaya et al. (2005), the 'Welcome to School' and 'Door to Door Visit' initiatives integrated into the SIPs have helped promote student enrollment from underprivileged groups. The SIP's scholarship program targets dropout and retention difficulties, helping to ensure the success of social inclusion. These programs also help to raise parental awareness of education, which is consistent with SIP's success in tackling social inclusion concerns.

Finally, the observation of a lack of awareness of Special Education highlighted the importance of comprehensive training programs to ensure that schools are completely prepared for inclusive education. These consequences emphasized the significance of addressing health, safety, administrative efficiency, and inclusive education initiatives to improve Lanao del Sur's educational setting.

#### 3.4.8. Strategic Planning and Sustainability

Within the theme of "strategic planning and sustainability," four out of 29 school principals gave remarkable insights. They underlined the importance of extensive brainstorming and preparation, as well as being aware of school-specific challenges before getting into the School Improvement Plan. Furthermore, they indicated a reliance on external support to accommodate demands for amending or replacing the SIP, implying potential difficulties in the process. Although some participants expressed negative views based on their recommendations, P26 expressed satisfaction with the SIP's comprehensive nature, stating that it contains all necessary data and information based on a three to five-year plan, resulting in a lack of specific recommendations. These shared experiences highlighted the diversity of perspectives among Lanao del Sur school principals on strategic planning and sustainability, demonstrating various levels of satisfaction and obstacles in the implementation of SIPs.

The findings validated Stevenson's (2019) argument. Stevenson (2019) underlines the need to comprehensively reflect on the plan's activities and instructional focus, assuring clarity on objectives, roles, progress indicators, and timetables. Furthermore, presenting a clear path to the vision of success, including strategy and precise stages, is critical for successful execution. Furthermore, Daca et al. (2020) discovered that successful implementation of SIP has a positive impact on enrollment, participation rate, cohort survival rate, graduation rate, and NAT MPS; however, their study also found that certain components of SIP, such as goals and objectives, performance targets, and implementation strategies, are moderately implemented, emphasizing the importance of strategic planning and effective execution in school improvement initiatives.

#### 3.4.9. Continuous Improvement and Adaptation

According to the findings, 13 out of 29 school principals, or nearly half of the participants, had similar answers to the theme of "continuous improvement and adaptation." The principals' responses demonstrated a collaborative willingness to embrace positive improvements. They prioritize academic growth, particularly in reading, and advocate for the use of ICT and the involvement of community members for tutorial support, emphasizing a collaborative approach to addressing educational issues. They also supported close monitoring at various

administrative levels and proposed sanctions for schools that did not have a SIP, demonstrating a desire for responsibility and commitment to reform plans. These recommendations show that school principals in Lanao del Sur are committed to ongoing improvement, adaptability, and proactive steps for educational advancement.

In line with this idea, Pelayo (2018) supports this method, stating that the SIP, with its three phases of assess, plan, and act, serves as a vehicle for a continuous improvement cycle, guaranteeing that each year's implementation progress is systematically examined and adjusted. These ideas, along with the SIP framework, demonstrate a comprehensive commitment to long-term progress in educational processes in Lanao del Sur.

This study also aligns with Van Dyke's (2020) research using Appreciative Inquiry in a rural school, highlighting the effectiveness of flexible and continuous improvement and collaborative approaches. The findings had significant implications for the province's educational system. Furthermore, the principals' recommendation for close monitoring and sanctions for schools that lack SIP emphasized the significance of accountability and systematic improvements at all administrative levels. These recommendations represented a province-wide commitment to developing a dynamic and adaptive educational system in Lanao del Sur, where continuous improvement is not only encouraged but also enforced through accountability measures.

### 3.5. PrinciPulse SIP Implementation Model: A Proposed Model Drawn from the Findings

Based on the study's identified themes, the researchers clustered them and developed an implementation strategy for school principals. This model is known as PrinciPulse (pronounced as "*principals*"). It is an empowering concept designed specifically for school principals, providing a strategic and dynamic approach to School Improvement Plans (SIP) implementation. This approach, which serves as the pulse of leadership, provides principals with the knowledge, enthusiasm, and direction required to manage the intricacies of improvement initiatives.

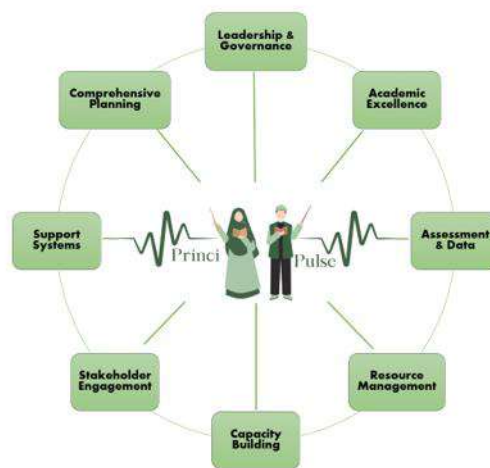


Figure 1: PrinciPulse SIP Implementation Model

The PrinciPulse School Improvement Plan (SIP) Implementation Model above establishes a comprehensive and interconnected framework for improving educational institutions. Figure 1 shows that the model is divided into several clusters. Leadership and Governance (Cluster 1) serve as the foundation for all other clusters, both influencing and being influenced. Academic Excellence (Cluster 2) is defined by strong leadership, policies, and activities that promote learning outcomes. Assessment and Data (Cluster 3) provide critical insights into academic performance that affect decision-making across the board. Resource Management (Cluster 4) is tightly linked, with leadership driving optimal allocation for sustainable growth. Capacity Building (Cluster 5) and Stakeholder Engagement (Cluster 6) thrive with effective governance, promoting a collaborative and empowered educational community. Leadership steers support systems (Cluster 7) to ensure overall well-being and safety. Finally, Comprehensive Planning (Cluster 8) brings everything together, with leadership steering the development and adaption of the SIP, resulting in a cohesive and integrated approach to school improvement. In this concept,

clusters are not independent entities, but rather interrelated features that work together to enhance the educational institution as a whole.

The PrinciPulse School Improvement Plan (SIP) implementation model puts school leadership at the center of improving educational institutions. The comprehensive framework, divided into eight clusters, specifies precise performance indicators for school principals, ensuring alignment with strategic goals and encouraging a holistic approach to improvement. Each cluster encompasses major components of school administration and development, ranging from leadership and governance to comprehensive planning. These indicators help principals manage student enrollment, academic excellence, assessment practices, resource allocation, capacity building, stakeholder engagement, support systems, and comprehensive planning. The indicators, which emphasize the interconnection of these clusters, serve as a road map for principals to navigate and improve various aspects of school management, assuring sustainable development and continuous improvement in the pursuit of educational excellence.

This model includes a holistic approach to School Improvement Plan (SIP) implementation, assisting school principals in navigating the many dimensions of educational leadership. It emphasizes the value of Leadership and governance, academic excellence, assessment and data, resource management, capacity building, stakeholder engagement, support systems, and comprehensive planning. By combining these clusters, PrinciPulse provides a comprehensive method for sustained improvement, establishing a dynamic and responsive educational environment led by school principals.

#### **4. Conclusion**

In conclusion, this study looked into the experiences of school principals in the province of Lanao del Sur as they implemented the School Improvement Plan (SIP). The outcomes of qualitative research and interviews with twenty-nine (29) school principals highlighted essential elements such as strategic governance for sustainable growth, enhancing education excellence, strategic self-assessment, resource management, and educational capacity and sustainability.

Participants demonstrated successful facilitation of the school improvement process by engaging and collaborating with stakeholders, providing support and development, and addressing challenges and constraints in pursuit of educational excellence. Valuable suggestions emerged to enhance SIP implementation, with an emphasis on strategic excellence, educational empowerment, safety, and sustainability.

The interviews also revealed extensive recommendations based on the experiences of the participants in this study, which provide an extensive guide to enhance the implementation of the SIP. The identified themes, which include comprehensive SIP development and implementation, collaborative engagement, resource management, professional growth and development, community involvement and support, data-informed decision-making, external collaboration and policy compliance, technological advancements and safety, and strategic planning and sustainability, form a strong framework.

The study's key findings led to the development of the PrinciPulse SIP Implementation Model, which includes eight critical clusters and provides a comprehensive framework for school principals to navigate the challenges of educational leadership and SIP implementation. This model defined performance indicators for principals to help them play a more active role in school improvement by creating an atmosphere conducive to sustainable development and continuous improvement of educational excellence. This proposed model is a great tool for school leaders committed to improving educational outcomes in Lanao del Sur. It synthesizes the study's findings and provides practical suggestions.

The shared experiences of the school principals on the implementation of the SIP in Lanao del Sur call for several recommendations that can be made to improve the effectiveness of SIP initiatives in the province of Lanao del Sur, and eventually to the whole MBHTE - BARMM. These recommendations are informed by the insights gathered from the experiences of the participants, addressing the various facets of SIP implementation. School

principals should proactively use the findings of this study to inform best practices and interventions for the successful implementation of the SIP. For example, by incorporating the findings into the strategic planning and decision-making processes, they can improve their performance.

Moreover, teachers are encouraged to consider their professional and personal development plans in context with the study's findings. They may concentrate on strengthening job-embedded responsibilities and addressing identified strengths and needs; pursue continuous learning and skill development to contribute to improved learning outcomes, such as achievement rates, retention rates, and lower dropout rates; and apply the study's findings to improve teaching practices. Also, stakeholders, especially parents and community members, are urged to recognize the significance of their support and participation in the success of the SIP implementation. The study underlines the importance of community engagement in the success of the SIP. As a result, stakeholders are encouraged to understand the special needs of their local schools and take the required steps to support and improve their educational settings.

Any future researchers investigating SIP implementation in various countries are encouraged to use this study as a secondary reference. It can be used as a reference to conduct similar research, apply procedures, and analyze findings. A more detailed and nuanced investigation of SIP experiences is recommended, using qualitative research design, mixed-method design, and data analysis tools such as MAXQDA. Future researchers might build on the findings of this study to better understand effective SIP in various contexts.

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# The Indonesian Independent Curriculum Requires Student-Centred Teaching Approaches: Does the Teacher Guide Accompanying a Grade VIII Ministry-Published Mathematics Textbook Assist Teachers?

Dewi Rahimah<sup>1</sup>, Agus Susanta<sup>2</sup>, Edi Susanto<sup>1</sup>, Tria Utari<sup>1</sup>

<sup>1</sup> The Study Program of Bachelor of Mathematics Education, The Faculty of Teacher Training and Pedagogy, Universitas Bengkulu, Bengkulu, Indonesia

<sup>2</sup> The Study Program of Master of Mathematics Education, The Faculty of Teacher Training and Pedagogy, Universitas Bengkulu, Bengkulu, Indonesia

Correspondence: Dewi Rahimah, The Study Program of Bachelor of Mathematics Education, The Faculty of Teacher Training and Pedagogy, Universitas Bengkulu, Bengkulu, Indonesia. E-mail: dewirahimah@unib.ac.id

## Abstract

The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia published mathematics textbooks accompanied by teacher guides to support the implementation of the independent curriculum requiring student-centred teaching approaches. It is important to know whether the teacher guides provide sufficient guidance for teachers in implementing student-centred teaching approaches in classrooms. This study was qualitative research applying textual analysis and a text-coding method. This research study found that in the teacher guide, pedagogical guidance for handling students' errors was provided only for one section of the textbook, namely, *Let Us Explore*, while pedagogical guidance for handling students' difficulties was not provided for any section of the textbook. An answer key without an explanation was provided for most of *Let Us Explore*, *Let Us Think Creatively*, and *Let Us Communicate* sections; an answer key with an explanation was provided for most of *Let Us Think Critically* sections; and for most of *Let Us Use Technology* and *Let Us Work Together* sections, an answer key was not provided. An explanation of how to use sections of the textbook was provided for most of *Let Us Explore*, *Let Us Work Together*, and *Let Us Communicate* sections, and it was dominated by teaching scenarios to use these sections.

**Keywords:** pedagogical guidance, teacher guide, mathematics textbook, student-centred teaching approach

## 1. Introduction

Indonesia has emphasised student-centred learning since the 1975 curriculum (Mailizar, Alafaleq, & Fan, 2014). The Indonesian curriculum has changed several times, and one of its purposes is to direct teaching and learning processes from teacher-centred learning to student-centred learning (Kementerian Pendidikan dan Kebudayaan

[The Ministry of Education and Culture], 2014). However, teacher-centred learning still dominates Indonesian classroom teaching. Student-centred learning has not been implemented in Indonesian classrooms as expected by the Indonesian curriculum (Sembiring, Hadi, & Dolk, 2008).

Since 2022, Indonesia has implemented a new curriculum called the independent curriculum. One of the learning principles in the implementation of the independent curriculum is applying various teaching models that support the holistic development of students' competencies and characters, such as inquiry-based learning, problem-based learning, and project-based learning (Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia [The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia], 2022a). These teaching models are in line with student-centred learning. These teaching models were also emphasised in the 2013 curriculum, a curriculum developed before the independent curriculum. However, Rahimah (2022) found that teachers faced difficulties in applying a student-centred teaching approach in the implementation of the 2013 curriculum.

The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia published textbooks to support the implementation of the independent curriculum. The textbooks are books prepared for learning based on national education standards and the independent curriculum, and must be used in learning (Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia [The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia], 2022b, 2022c). Textbooks are the main teaching resources for Indonesian teachers (Mailizar & Fan, 2014). In addition to the textbooks, the Indonesian government also provides teacher guides.

Teacher guides direct teachers on how to do classroom teaching (Remillard, 2018). Matic and Gracin (2020) suggest that teacher guides support teaching methods used in classroom teaching. However, Rahimah (2022), who did research on a teacher guide accompanying a Ministry-published textbook supporting the 2013 curriculum, found that teachers did not get sufficient assistance from the teacher guide to apply a student-centred teaching approach.

Pedagogical guidance is an essential part of teacher guides (Hemmi, Krzywacki, & Koljonen, 2018). Remillard (2018) explains that teachers usually consider and interpret pedagogical guidance and insights presented in curriculum resources when they use them in making lesson plans and in teaching. Furthermore, Remillard (2018) elucidates that pedagogical guidance and insights consist of instructional objectives, directions on how to conduct classroom activities and how to explain mathematical content, examples of students' responses to tasks and concepts underlying the responses, examples of students' difficulties and errors, and how to handle these. Pedagogical guidance provided in teacher guides to apply student-centred teaching approaches using the independent curriculum textbooks published by the Ministry of Education, Culture, Research, and Technology needs to be explored.

This research study analysed how pedagogical guidance was provided in a teacher guide accompanying a Ministry-published Mathematics Junior High School Grade VIII textbook. It is important to know how the teacher guide assisted teachers in conducting student-centred teaching approaches in classrooms. The findings of this research study revealed how pedagogical guidance was provided in the teacher guide to support teachers in implementing student-centred teaching approaches. These findings are useful for the improvement of the teacher guide in the future.

## 2. Method

This research study analysed pedagogical guidance given in a teacher guide (Tohir, As'ari, Anam, & Taufiq, 2022a) accompanying the "Matematika SMP/MTs Kelas VIII" ["Mathematics Junior High School Grade VIII"] textbook published by Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia [The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia] (Tohir, As'ari, Anam, & Taufiq, 2022b). I analysed the teacher guide because it accompanies a textbook published by the Ministry of



Education, Culture, Research, and Technology of the Republic of Indonesia, in which the textbook and the teacher should be in line with the teaching approaches expected by the independent curriculum. In addition, each chapter of the “Matematika SMP/MTs Kelas VIII” [“Mathematics Junior High School Grade VIII”] textbook published by Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia [The Ministry of Education, Culture, Research, and Technology of Republic of Indonesia] (Tohir et al., 2022b) to support the Independent curriculum contains several sections that are similar to sections of the “Matematika SMP/MTs Kelas VIII Semester 1” [“Mathematics Junior High School Grade 8 Semester 1”] textbook published by Kementerian Pendidikan dan Kebudayaan [The Ministry of Education and Culture] (As'ari, Tohir, Valentino, Imron, & Taufiq, 2017) that representing steps of a student-centred teaching approach in the implementation of the 2013 curriculum. Rahimah (2022) found that the teacher guide accompanying the 2013 curriculum textbook did not well support teachers to apply a student-centred teaching approach. Examining pedagogical guidance in a teacher guide accompanying the independent curriculum textbook also revealed whether there was improvement or not in a teacher guide accompanying a Ministry-published textbook in supporting teachers to apply a student-centred teaching approach.

This was a qualitative research study. This research study used textual analysis with a text-coding method and then analysed the data descriptively. By applying the text-coding method, researchers can reveal patterns in texts (Auerbach & Silversten, 2003). The teacher guide was examined as designed (cf. Remillard, 2005) or as written (cf. Remillard, 2012). This research study scrutinised words (cf. Braun & Clarke, 2013; cf. Merriam & Tisdell, 2016) and explored problems (Creswell, 2021).

This research study applied the *horizontal* analysis, in which the *horizontal* analysis focused on elements presented in curriculum resources (Charalambous, Delaney, Hsu, & Mesa, 2010). The horizontal analysis can be used to identify features in curriculum resources designed to provide student learning opportunities (Rahimah & Visnovska, 2021). This research study examined the pedagogical guidance provided by the teacher guide in using *Let Us Explore*, *Let Us Think Critically*, *Let Us Think Creatively*, *Let Us Use Technology*, *Let Us Work Together*, and *Let Us Communicate* sections of the textbook. It is important to analyse the pedagogical guidance provided for using these sections because these sections provided tasks for students to find and understand mathematical concepts (Tohir et al., 2022a, 2022b). The numbers of these sections in the textbook are presented in Table 1.

Table 1: The numbers of the sections

Sections	Numbers
<i>Let Us Explore</i>	33
<i>Let Us Think Critically</i>	33
<i>Let Us Think Creatively</i>	24
<i>Let Us Use Technology</i>	15
<i>Let Us Work Together</i>	7
<i>Let Us Communicate</i>	15

The framework used for examining the texts is presented in Table 2 below. The framework was created based on the types of pedagogical guidance provided in the teacher guide.

Table 2: The categories for each type of pedagogical guidance in the teacher guide

Types	Categories
An additional explanation	No additional explanation provided An additional explanation about a teaching scenario An additional explanation about mathematical content
An answer key	No answer key provided An answer key without an explanation An answer key with an explanation No answer key needed
Pedagogical guidance for handling students' mathematical content problems	No pedagogical guidance for handling students' mathematical content problems provided Pedagogical guidance for handling students' difficulties Pedagogical guidance for handling students' errors

### 3. Results

The results of the exploration of pedagogical guidance presented in the teacher guide are grouped based on the types of pedagogical guidance, namely, an additional explanation, an answer key, and pedagogical guidance for handling students' mathematical content problems. Several examples of pedagogical guidance are also provided.

#### 3.1 An additional Explanation

The proportions of each category of additional information provided in the teacher guide for each section of the "Matematika SMP/MTs Kelas VIII" ["Mathematics Junior High School Grade VIII"] textbook published by Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia [The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia] (Tohir et al., 2022b) textbook are presented in Figure 1.

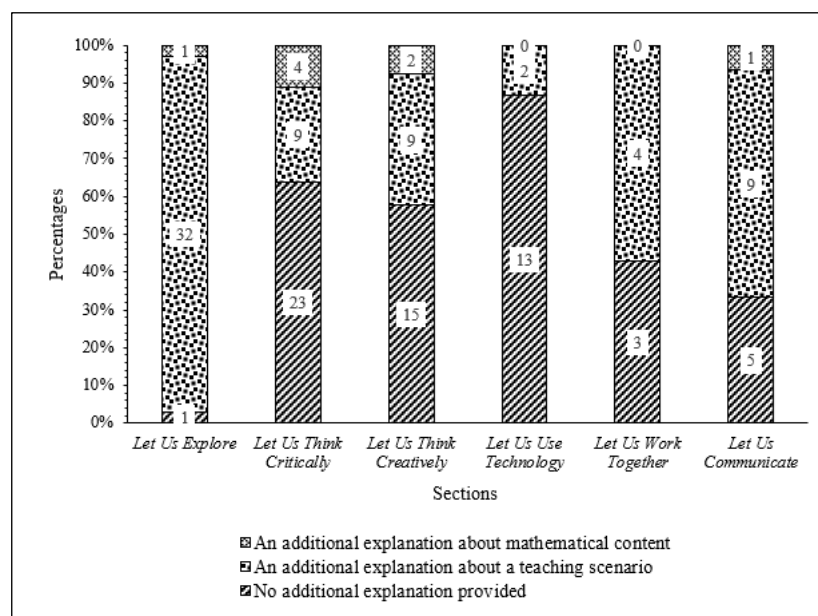


Figure 1: The proportions of the categories of an additional explanation

An additional explanation about how to use the Ministry-published textbook sections was provided for almost all of *Let Us Explore* sections. However, the additional explanation was provided only for about 60% of *Let Us Work Together* and *Let Us Communicate* sections, and less than 50% of *Let Us Think Critically*, *Let Us Think Creatively*, and *Let Us Use Technology* sections.

Most of the additional explanations was about a teaching scenario. An example of tasks in the textbook having an additional explanation about a teaching scenario in the teacher guide can be seen in Figure 2. The task was given in a *Let Us Explore* section.

There are many uses of the Pythagorean theorem in everyday life. One of them is in the field of building construction. A handyman and his workers get a project to build a house. Before starting construction, the builders must first make right-angled threads on the *baw plank* installation as a reference for making foundations, walls, and other elements so that the house can be built properly and firmly. Below is an illustration for forming a right angle.



Figure 2.2 Creating a right angle.

Figure 2.2 above shows that some builders ensure that the corner of the house foundation must form a right angle by using a wire and tape measure. The comparisons of sizes prepared by the builders are

30 cm, 40 cm, 50 cm  
 12 cm, 5 cm, 14 cm  
 60 cm, 80 cm, 100 cm  
 90 cm, 120 cm, 140 cm  
 12 cm, 16 cm, 20 cm

How can you help the builder prove that the comparisons form a right triangle or not?

Figure 2: An example of tasks in the textbook having an additional explanation about a teaching scenario in the teacher guide

*Note.* Translated from “Matematika SMP/MTs Kelas VIII” [“Mathematics Junior High School Grade VIII”] (pp. 51-52), by M. Tohir, A. R. As'ari, A. C. Anam, & I. Taufiq, 2022, Jakarta, Indonesia: Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia [The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia]. Copyright 2022 by Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia [The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia].

An additional explanation about a teaching scenario for the task given in the teacher guide is presented in Figure 3.

The teacher invites students to observe the drawings of builders who are checking the certainty of right angles on the basic design of a building. The teacher is expected to be able to provide illustrations and explanations regarding right triangles and not right triangles in the image given, or the teacher can provide other illustrations related to the activity.

In this section, the teacher is expected to be able to provide guidance and understanding to students through the exploration activity and be able to provide examples regarding the shape of a right triangle and not a right triangle.

Figure 3: An example of an additional explanation about a teaching scenario in the teacher guide

*Note.* Translated from “Buku Panduan Guru SMP/MTs Kelas VIII” [“Teacher Guide of Mathematics Junior High School Grade VIII”] (p. 95), by M. Tohir, A. R. As'ari, A. C. Anam, & I. Taufiq, 2022, Jakarta, Indonesia: Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia [The Ministry of Education,

Culture, Research, and Technology of the Republic of Indonesia]. Copyright 2022 by Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia [The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia].

The task presented in Figure 2 asked students to prove whether each comparison of sizes formed a right triangle or not. In Figure 3, the teacher guide explained a teaching scenario to do the task, which consisted of activities to help students understand the concept of the Pythagorean triple and information that teachers need to explain to their students. With this pedagogical guidance, teachers knew what they should do when carrying out the task designed by the textbook authors. This could help teachers achieve the learning purposes that the textbook authors had set up to achieve through working on the task. Pedagogical guidance about teaching scenarios could prevent tasks that had been designed for a student-centred teaching approach from transforming into a teacher-centred teaching approach for achieving learning purposes.

An additional explanation about mathematical content was provided for less than 12% of *Let Us Explore*, *Let Us Think Critically*, *Let Us Think Creatively*, and *Let Us Communicate* sections, while for *Let Us Use Technology* and *Let Us Work Together*, this category of an additional explanation was not provided.

An example of tasks in the textbook having an additional explanation about mathematical content in the teacher guide is presented in Figure 4. The task was given in a *Let Us Think Critically* section.

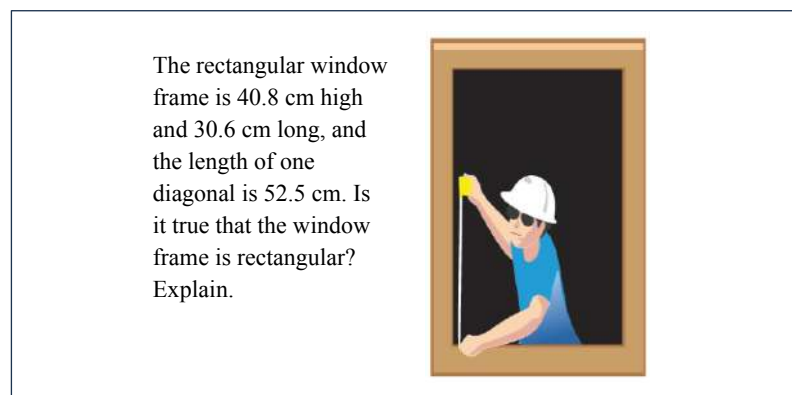
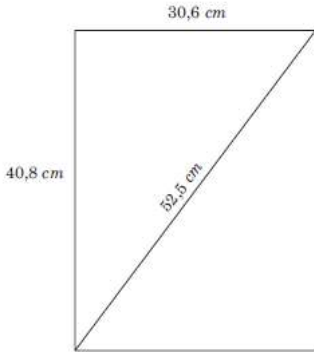


Figure 4: An example of tasks in the textbook having an additional explanation about mathematical content in the teacher guide

*Note.* Translated from “Matematika SMP/MTs Kelas VIII” [“Mathematics Junior High School Grade VIII”] (p. 75), by M. Tohir, A. R. As'ari, A. C. Anam, & I. Taufiq, 2022, Jakarta, Indonesia: Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia [The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia]. Copyright 2022 by Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia [The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia].

An additional explanation about the mathematical content of the task given in the teacher guide is presented in Figure 5.

The window frame forms a rectangle if all four corners are right angles. To prove that each angle on the window frame is a right angle, you need to use the Pythagorean triple.



Based on the picture above, it must be proven that

$$52,5^2 = 40,8^2 + 30,6^2$$

A Pythagorean triple occurs if  $c^2 = a^2 + b^2$  the length of the diagonal

$$c^2 = (40,8)^2 + (30,6)^2$$

$$c^2 = 1664,64 + 939,36$$

$$c^2 = 2601$$

$$c = \sqrt{2601} = 51$$

The corners will be a right angle if the length of the diagonal is 51 cm. Because the diagonal of the window frame on the problem is 52.5 cm. So, the window frame does not form a rectangle.

Figure 5: An example of an additional explanation about mathematical content in the teacher guide

*Note.* Translated from “Buku Panduan Guru SMP/MTs Kelas VIII” [“Teacher Guide of Mathematics Junior High School Grade VIII”] (p. 115), by M. Tohir, A. R. As'ari, A. C. Anam, & I. Taufiq, 2022, Jakarta, Indonesia: Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia [The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia]. Copyright 2022 by Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia [The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia].

The task presented in Figure 4 asked students to scrutinise a window frame that looked like a rectangle. In Figure 5, the teacher guide provided an explanation of how a Pythagorean triple could be used to prove that the window frame was rectangular. The steps for how to apply the Pythagorean triple by using the information given in the task were provided in the teacher guide. The explanation was categorised as an additional explanation about mathematical content.

More than 55% of *Let Us Think Critically*, *Let Us Think Creatively*, and *Let Us Use Technology* sections did not have an additional explanation about a teaching scenario or mathematical content. An example of tasks in the textbook having no additional explanation in the teacher guide is presented in Figure 6. The task was given in a *Let Us Use Technology* section.

To make it easier to complete **Let's Think Creatively**, you can use the calculator at the following link  
<https://www.geogebra.org/calculator> or  
<https://www.desmos.com/scientiic?lang=id>

Figure 6: An example of tasks in the textbook having no additional explanation in the teacher guide

*Note.* Translated from “Matematika SMP/MTs Kelas VIII” [“Mathematics Junior High School Grade VIII”] (p. 9), by M. Tohir, A. R. As'ari, A. C. Anam, & I. Taufiq, 2022, Jakarta, Indonesia: Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia [The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia]. Copyright 2022 by Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia [The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia].

The teacher guide presented the same thing as what was written in the textbook (see Figure 7). So, there was no additional explanation for the task given in the teacher guide.

To make it easier to complete **Let's Think Creatively**, you can use the calculator at the following link  
<https://www.geogebra.org/calculator> or  
<https://www.desmos.com/scientiic?lang=id>

Figure 7: An example of an explanation given in the teacher guide that was the same as the task presented in the textbook

*Note.* Translated from “Buku Panduan Guru SMP/MTs Kelas VIII” [“Teacher Guide of Mathematics Junior High School Grade VIII”] (p. 42), by M. Tohir, A. R. As'ari, A. C. Anam, & I. Taufiq, 2022, Jakarta, Indonesia: Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia [The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia]. Copyright 2022 by Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia [The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia].

The task presented in Figure 6 asked students to use certain websites to help them solve problems given in the previous section. However, as it was presented in Figure 7, instead of giving guidance for teachers in using the websites to solve the problems, the teacher guide simply copied the task given in the textbook without any additional explanation. The teacher guide did not provide any additional information about the teaching scenario or the mathematical content of the task. In terms of providing pedagogical guidance for teachers in using the task, the teacher guide could not have an educative and directive impact on teachers. Additional information about teaching scenarios is directive materials for teachers (Matic & Gracin, 2020), while additional information about mathematical content is educative materials for teachers (Davis & Krajcik, 2005).

### 3.2 An Answer Key

The proportions of each category of answer keys provided in the teacher guide for each section of the “Matematika SMP/MTs Kelas VIII” [“Mathematics Junior High School Grade VIII”] textbook published by Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia [The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia] (Tohir et al., 2022b) textbook are presented in Figure 8.

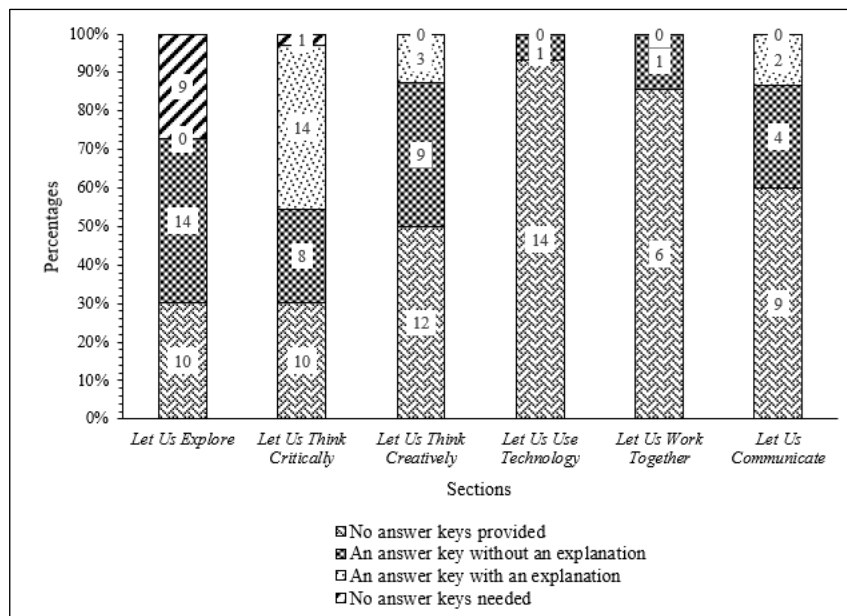


Figure 8: The proportions of the categories of answer keys

No answer key was provided for most of *Let Us Use Technology*, *Let Us Work Together*, and *Let Us Communicate* sections of the textbook. Only one out of the fifteen examined *Let Us Use Technology* sections had an answer key, and the answer key was without an explanation. In addition, most of the *Let Us Use Technology* sections had no additional explanation about a teaching scenario or mathematical content in the teacher guide. Most of the *Let Us Use Technology* sections that had no answer key and no additional explanation in the teacher guide showed that the teacher guide had limited support for teachers in using these sections.

An example of tasks in the textbook having no answer key in the teacher guide is presented in Figure 9. The task was given in a *Let Us Work Together* section.

Discuss with your tablemates. What is the general form of a linear equation with one variable, and why?

Figure 9: An example of tasks in the textbook having no answer key in the teacher guide

*Note.* Translated from “Matematika SMP/MTs Kelas VIII” [“Mathematics Junior High School Grade VIII”] (p. 111), by M. Tohir, A. R. As'ari, A. C. Anam, & I. Taufiq, 2022, Jakarta, Indonesia: Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia [The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia]. Copyright 2022 by Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia [The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia].

The teacher guide only copied what had been written in the textbook (see Figure 10). So, there was no answer key provided for the task given in the teacher guide.

Discuss with your tablemates. What is the general form of a linear equation with one variable, and why?

Figure 10: An example of an explanation given in the teacher guide that is the same as the task presented in the textbook

*Note.* Translated from “Buku Panduan Guru SMP/MTs Kelas VIII” [“Teacher Guide of Mathematics Junior High School Grade VIII”] (p. 144), by M. Tohir, A. R. As'ari, A. C. Anam, & I. Taufiq, 2022, Jakarta, Indonesia: Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia [The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia]. Copyright 2022 by Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia [The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia].

The task presented in Figure 9 asked students to find out the general form of a linear equation with one variable and give reasons. However, as it is presented in Figure 10, the teacher guide did not provide the steps on how to do it or the final answer. The teacher guide only presented texts that were exactly the same as the texts given in the textbook.

An answer key without an explanation was provided for about 40% of *Let Us Explore* and *Let Us Think Creatively* sections. In the *Let Us Explore* and *Let Us Think Creatively* sections, students were expected to find information on investigating and understanding new mathematical concepts (Tohir et al., 2022a, 2022b). An example of tasks in the textbook having an answer key without an explanation in the teacher guide can be seen in Figure 11. The task was presented in a *Let Us Think Creatively* section.

Given an equation  $\frac{3^a}{3^b} = 3^4$ . Determine the values of  $a$  and  $b$  from 1 to 9 that they fulfill the equation.

Figure 11: An example of tasks in the textbook having an answer key without an explanation in the teacher guide

*Note.* Translated from “Matematika SMP/MTs Kelas VIII” [“Mathematics Junior High School Grade VIII”] (p. 16), by M. Tohir, A. R. As'ari, A. C. Anam, & I. Taufiq, 2022, Jakarta, Indonesia: Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia [The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia]. Copyright 2022 by Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia [The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia].

An answer key without an explanation provided in the teacher guide for the task is given in Figure 12.

The problem has many solutions.  
 $a$  and  $b$  having a difference of 4 are  $a = 5$  and  $b = 1$ ,  $a = 6$  and  $b = 2$ ,  $a = 7$   
 and  $b = 3$ ,  $a = 8$  and  $b = 4$ ,  $a = 9$  and  $b = 5$ .

Figure 12: An example of an answer key without an explanation in the teacher guide

*Note.* Translated from “Buku Panduan Guru SMP/MTs Kelas VIII” [“Teacher Guide of Mathematics Junior High School Grade VIII”] (p. 51), by M. Tohir, A. R. As'ari, A. C. Anam, & I. Taufiq, 2022, Jakarta, Indonesia: Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia [The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia]. Copyright 2022 by Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia [The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia].

The task presented in Figure 11 asked students to find out the values of variables  $a$  and  $b$  in an equation. In Figure 12, the teacher guide did not give an explanation of how to get each pair of  $a$  and  $b$  or the steps to do the task. Students could have questions, such as what they had to start with or what mathematical concepts they could use to answer the question. The teacher guide did not provide assistance for teachers to explain it. The teacher guide



authors did not give an explanation of the answer key. Probably, they believed teachers could find the solution, and they wanted to provide opportunities for teachers to develop their thinking.

*Let Us Think Critically* sections, about 60% of them were given an answer key, and more than half of the answer keys had an explanation in the teacher guide. In the *Let Us Think Critically* sections, students are invited to investigate and understand new mathematical concepts or knowledge through guided re-invention (Tohir et al., 2022a, 2022b). Teacher guidance is needed when students are working on these sections. As in working on these sections, students are investigating new mathematical concepts or knowledge, and teachers need to understand the mathematical concepts or knowledge in order to guide students. Less than 50% of the *Let Us Think Critically* sections having an answer key with an explanation showed that the teacher guide did not provide sufficient support for teachers in guiding students when the students were working on these sections.

An example of tasks in the textbook having an answer key with an explanation in the teacher guide is presented in Figure 13. The task was given in a *Let Us Think Critically* section.

Adults usually take around 24,000 breaths per day. Write an equation that shows the number of times a person breathes in one minute.

Figure 13: An example of tasks in the textbook having an answer key with an explanation in the teacher guide

*Note.* Translated from “Matematika SMP/MTs Kelas VIII” [“Mathematics Junior High School Grade VIII”] (p. 112), by M. Tohir, A. R. As'ari, A. C. Anam, & I. Taufiq, 2022, Jakarta, Indonesia: Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia [The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia]. Copyright 2022 by Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia [The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia].

An answer key with an explanation provided in the teacher guide for the task is given in Figure 14.

For example:  
Breathing in a day =  $p$   
In a day there are 24 hours which means  $24 \times 60 = 1440$  minutes.  
So, the equation is  $p = \frac{24.000}{1.440}$

Figure 14: An example of an answer key with an explanation in the teacher guide

*Note.* Translated from “Buku Panduan Guru SMP/MTs Kelas VIII” [“Teacher Guide of Mathematics Junior High School Grade VIII”] (p. 145), by M. Tohir, A. R. As'ari, A. C. Anam, & I. Taufiq, 2022, Jakarta, Indonesia: Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia [The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia]. Copyright 2022 by Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia [The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia].

The task presented in Figure 13 asked students to make an equation based on the given information. However, the unit of time given in the task was “day,” while the question asked students to write an equation with “minute” as the unit of time. Before reaching the final answer, as it can be seen in Figure 14, the teacher guide presented an explanation that students needed to change the unit of time from “day” to “minute” in making the equation.

### 3.3 Pedagogical Guidance for Handling Students' Mathematical Content Problems

The proportions of each category of pedagogical guidance for handling students' mathematical content problems provided in the teacher guide for each section of the "Matematika SMP/MTs Kelas VIII" ["Mathematics Junior High School Grade VIII"] textbook published by Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia [The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia] (Tohir et al., 2022b) textbook are presented in Figure 15.

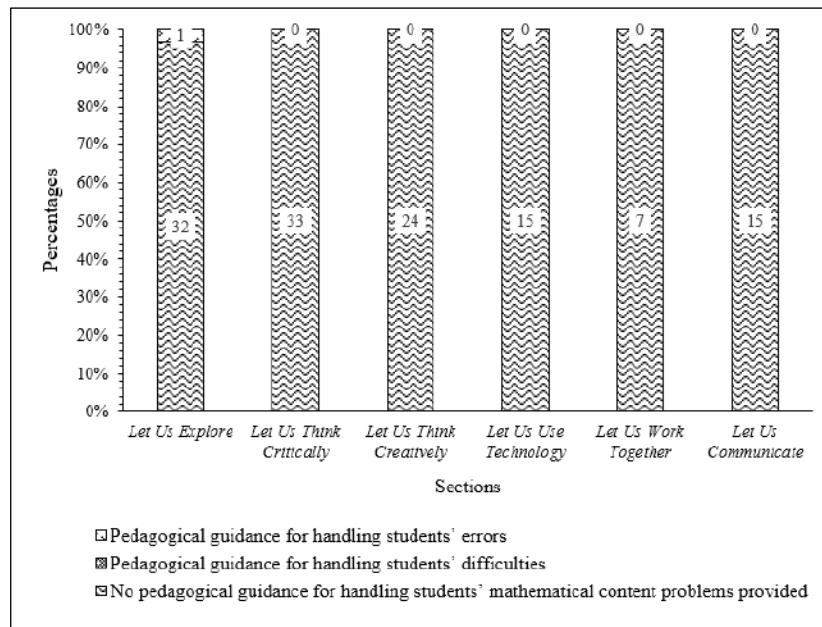


Figure 15: The proportions of the categories of pedagogical guidance for handling students' mathematical content problems

Most of the Ministry-published textbook section had no pedagogical guidance for handling students' mathematical content problems in the teacher guide. Only one section of the textbook had pedagogical guidance for handling students' mathematical content problems in the teacher guide. It was pedagogical guidance for handling students' errors, which was provided for one *Let Us Explore* section of the textbook. Teachers need pedagogical guidance in handling students' errors and difficulties to overcome students' mathematical content problems (Shulman, 1986). This type of pedagogical guidance was rarely provided in the teacher guide. This was a critical issue for the teacher guide.

In the teacher guide, pedagogical guidance for handling students' errors was given for a *Let Us Explore* section of the textbook. In this section, students were invited to define exponential numbers by looking at a table as presented in Figure 16.

Exponential numbers	Multiplication Forms	Values
$2^1$	2	2
$2^2$	$2 \times 2$	4
$2^3$	$2 \times 2 \times 2$	8
$2^4$	$2 \times 2 \times 2 \times 2$	16
$2^5$	$2 \times 2 \times 2 \times 2 \times 2$	32
...	⏟	
$2^n$	$2 \times 2 \times 2 \times 2 \times 2 \times \dots \times 2$ n times	

Figure 16: An example of tasks in the textbook having pedagogical guidance for handling students' errors

*Note.* Translated from “Matematika SMP/MTs Kelas VIII” [“Mathematics Junior High School Grade VIII”] (p. 7), by M. Tohir, A. R. As'ari, A. C. Anam, & I. Taufiq, 2022, Jakarta, Indonesia: Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia [The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia]. Copyright 2022 by Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia [The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia].

The pedagogical guidance for handling students' errors given by the teacher guide is presented in Figure 17.

Students can make mistakes on exponential numbers, for example, students consider that  $3^2$  is  $3 \times 2$  and students consider that  $3^3$  is  $3 \times 3$ . Students can experience this if they do not understand the concept of exponential numbers. Therefore, teachers must provide maximum reinforcement and understanding of the concept of exponential numbers.

Figure 17: An example of an answer key without an explanation in the teacher guide

*Note.* Translated from “Buku Panduan Guru SMP/MTs Kelas VIII” [“Teacher Guide of Mathematics Junior High School Grade VIII”] (p. 41), by M. Tohir, A. R. As'ari, A. C. Anam, & I. Taufiq, 2022, Jakarta, Indonesia: Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia [The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia]. Copyright 2022 by Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia [The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia].

The task presented in Figure 16 asked students to find out the definition of exponential numbers. In Figure 17, the teacher guide gave an example of mistakes that students could make when they worked on the textbook section. The teacher guide explained what teachers should do to handle the error. However, the pedagogical guidance did not give a detailed explanation of how to provide maximum reinforcement and understanding of the concept of exponential numbers.

## 4. Discussion

The discussion of the exploration of pedagogical guidance presented in the teacher guide is grouped based on the types of pedagogical guidance, namely, an additional explanation, an answer key, and pedagogical guidance for handling students' mathematical content problems.

### 4.1 An Additional Explanation

More than 55% of *Let Us Think Critically*, *Let Us Think Creatively*, and *Let Us Use Technology* sections of the textbook that did not have an additional explanation about a teaching scenario or mathematical content were a serious weakness of the teacher guide. Teacher guides as curriculum materials should be designed to guide teachers in conducting their teaching (Stein, Remillard, & Smith, 2007). However, the teacher guide authors provide an additional explanation for almost all of *Let Us Explore* sections of the textbook. In the *Let Us Explore* sections, the textbook authors expected students to be actively involved in finding and understanding new knowledge or concepts (Tohir et al., 2022b). Teachers' guidance is needed to avoid partial knowledge, students' confusion, and misconceptions (Kirschner, Sweller, & Clark, 2006). Students are required to use, connect, and describe their knowledge when they think creatively and critically (Raub, Shukor, Arshad, & Rosli, 2015). Students need guidance from their teacher to do this. However, Rahimah (2022), who researched the usage of a Ministry-published textbook aimed at supporting a student-centred approach, found that teachers had difficulties when they use the textbook because of insufficient pedagogical guidance in the textbook and its accompanying teacher guide. Lack of pedagogical guidance to use the Ministry-published textbook sections can cause a student-centred approach that cannot be implemented as it is designed by the textbook authors.

It seems that teacher guide authors were aware that teachers needed guidance to apply the teaching approach that had been designed in the textbook. Teachers' understanding of mathematical scenarios influences the quality of classroom teaching (Zembar & Yasa, 2015). However, it is still possible that classroom teaching is not conducted as the textbook authors expected. Teachers adapted the focus of the task based on their pedagogical beliefs and students' abilities (Looi, Sun, Seow, & Chia, 2014).

Classroom teaching involving inquiry activities in implementing a student-centred teaching approach is a challenging duty for teachers because they tend to tell or show students about what students need to do when they guide students in developing students' thinking (Hähkiöniemi & Francisco, 2019). This can drive the student-centred teaching approach to be a more conventional teaching method, which is contradictory to what the textbook authors tried to develop. Therefore, additional information about teaching scenarios is essential pedagogical guidance that should exist in a teacher guide.

Teachers did not get sufficient guidance from the teacher guide on how to assist students in doing tasks given in the textbook in terms of mathematical content. On the other hand, students need to understand mathematical content before they associate mathematical concepts when they think critically and creatively (Askew, 2015). Insufficient additional explanation about the mathematical content provided for teachers is one of the limitations of the teacher guide. An effective teacher guide should have explanations about mathematical content (Ding & Li, 2014). Teachers need this category of pedagogical guidance to guide their students when they are using or working on tasks. This is because developing students' mathematical thinking for solving mathematical problems requires a high-level understanding of mathematical concepts (Hähkiöniemi & Francisco, 2019).

Teachers need to understand mathematical content and have knowledge about teaching mathematical content (Davis et al., 2014). The way textbooks present mathematical content influences teachers' classroom teaching (Davis, Palincsar, Smith, Arias, & Kademian, 2017). Additional explanations about mathematical content in the teacher guide can help teachers direct their students when they are working on tasks given in the textbook. For example, an additional explanation provided in the teacher guide about the usage of the Pythagorean triple to work on a task from the textbook asking to prove that a window frame is rectangular can help teachers guide students

when they are working on the task (see Figure 5). With pedagogical guidance related to mathematical content, teachers can direct classroom teaching to achieve the purpose of working on tasks designed by textbook authors.

Teacher guides are one of the curriculum materials. Curriculum materials are used as learning resources by teachers, and this affects classroom teaching (Ball & Cohen, 1996). Teachers can use the teacher guide as curriculum materials to learn how to conduct classroom teaching as expected by textbook authors and how to assist students in constructing and understanding mathematical concepts. Additional information about teaching scenarios (Matic & Gracin, 2020) and additional mathematical content (Davis & Krajcik, 2005) are essential components of a teacher guide. Without these components, the teacher guides could not be used as a resource to support teachers in implementing the teaching approaches expected by the curriculum.

The data showed that teachers did not get full support from the teacher guide to conduct classroom teaching using the textbook. Without adequate information on how to use textbook sections, teachers would have difficulties using the textbook sections in their teaching (Yıldırım, 2010). Teachers need pedagogical guidance to help students construct their knowledge (Ding & Li, 2014). Nevertheless, if more *Let Us Work Together* and *Let Us Communicate* sections of the textbook had an additional explanation in the teacher guide about how to use them, teachers could get support from the teacher guide to guide students working on these sections. Guidance from teachers can help students develop their mathematical thinking, either to think critically or to think creatively (Kooloos, Oolbekink-Marchand, van Boven, Kaenders, & Heckman, 2022).

#### 4.2 An Answer Key

In *Let Us Work Together* and *Let Us Communicate* sections of the textbook, students were expected to discuss their thinking and ideas as well as work together to solve problems (Tohir et al., 2022a, 2022b). Probably, because of this reason, most of the answers to the problems are not presented in these sections. The answers could be provided in sections of the teacher guide that link to sections of the textbook presenting the problems. In *Let Us Use Technology* sections, students were expected to use technology to solve problems (Tohir et al., 2022a, 2022b). Teachers have difficulties developing their skills and knowledge to use technology, so they cannot provide support for their students in using technology in their classroom teaching (Amuko, Miheso, & Ndeuthi, 2015). Without pedagogical guidance to use the *Let Us Use Technology* sections in the teacher guide, teachers did not have direction from the teacher guide on how to guide their students when the students were working on these sections in the textbook.

A research study conducted by Rahimah (2022) on the use of a Ministry-published textbook and its accompanying teacher guide to support a student-centred approach found that the participating teachers did not use the teacher guide because it was too similar to the textbook. Thus, teachers may not value the teacher guide when the content is similar to the content of the textbook, and the answer keys and explanations of how to solve the problems cannot be found in the teacher guide.

Answer keys provided in a teacher guide can help teachers who do not fully understand mathematical concepts to give many questions for their students, but of course the teachers need to be able to demonstrate how to solve one or two of those questions (Chowdhuri, 2020). Thus, without the answer keys provided in the teacher guide, teachers did not get support in giving many questions to their students from the teacher guide. An explanation related to answer keys is important pedagogical guidance because this could help teachers direct students when they are working on tasks given in the sections of the textbook. Without explanation, teachers would not have a complete description of how to get the correct answers. Even though the explanation is highly formalised and not process-based, teachers will value it (Chowdhuri, 2020).

With explanations of answer keys, teachers, especially those who are weak in understanding mathematical concepts, will have clear guidance on how to answer questions (Chowdhuri, 2020). Without explanations, teachers who still have problems understanding mathematical concepts need to explore solutions on their own in order to

get answers that are similar to the answer keys given in the teacher guide. When the answers that they get are different from the answer keys, without an explanation of the answer keys, the teachers can get confused about what mistakes they made when they were working on the solution. By having an answer key with an explanation, teachers, especially those who did not know the right answer, had a direction on how to guide their students in working on the task.

By using answer keys given in a teacher guide, teachers check the answers to tasks given in a textbook (Rahimah, 2022). Answer keys with an explanation are one type of pedagogical guidance that teachers need in order to guide their students in working on tasks, especially when the teachers still have problems understanding the new mathematical concepts or knowledge being investigated (Chowdhuri, 2020). By providing answer keys with an explanation for each section of the textbook in the teacher guide, teachers can be more confident and have more direction in guiding students when the students are working on tasks given in the textbook. Teachers assess students' answers (Mellone et al., 2020) and facilitate them in building their knowledge (Ding & Li, 2014). As the teacher guide did not provide an explanation of answer keys for most of the tasks given by the textbook sections, it seems that the teacher guide authors provided opportunities for teachers to develop their understanding of mathematical contents.

#### *4.3 Pedagogical Guidance for Handling Students' Mathematical Content Problems*

If a teacher guide provides sufficient pedagogical guidance for handling students' errors and difficulties, the teacher guide does not only help teachers overcome students' mathematical content problems but also educates teachers on how to face unexpected conditions during classroom teaching (Matic & Gracin, 2020). This pedagogical guidance makes teachers aware of that sort of misconception and how to handle this problem, even though the information is not very clear.

Teachers consider a teacher guide useful when the guide provides guidance for teachers in teaching mathematical content and handling mathematical teaching problems (Matic & Gracin, 2020; Steenbrugge, Valcke, & Desoete, 2012). Teachers do not consider that reading a teacher guide is helpful when the teacher guide is not giving the pedagogical guidance that teachers need in teaching using its textbook (Rahimah, 2022). Pedagogical guidance to handle students' mathematical content problems, such as students' difficulties and students' errors, is important information that teachers expect to be presented in a teacher guide.

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# Lifelong Learning Review in Contemporary Japan

Xuan Zhao<sup>1</sup>

<sup>1</sup> Zhejiang Shuren University, Hangzhou, Zhejiang, China, 310015

Correspondence: Xuan Zhao. Email: zhaoxuan1117@163.com

## Abstract

In the era of the Meiji Restoration, social education for adults in Japan has taken shape to make up for the lack of school education. After World War II, social education in Japan focused on compensation education and vocational training for young and adult women. With the promulgation of the Basic Education Law and the Social Education Law, "social education as the legal right of Japanese" was clarified. Governments were encouraged to develop and operate public social education facilities. From the late 1940s to the mid-1980s, "social education" included adult education activities in addition to primary and secondary schools and higher education institutions. Since the 1960s, UNESCO's propaganda activities have promoted the idea of "lifelong education" in Japan, and the official acknowledged that domestic demand for lifelong education had become more apparent. In 1971, the Central Education Committee issued a report recommending that "from the perspective of lifelong education, comprehensive adjustments of the entire education system are required." In 1981, the Central Education Commission of Japan submitted a lifelong education report to MEXT, which emphasized the necessity and importance of "lifelong education" and marked the beginning of the transition to lifelong education in Japan. Since the mid-1980s, "lifelong learning" has become the most common term in Japan for adult education activities. In the 21st century, with the support of local and national governments, people can freely choose formal, informal, or non-informal learning opportunities at any time, and relevant institutions would offer appropriate certificates.

**Keywords:** Lifelong Learning, Lifelong Education, Social Education, Japan

## 1. The Evolution of Lifelong Learning in Japan

### *1.1 Meiji Era: The embryonic form of Japanese social education*

Since the Meiji Emperor issued the Education Order in 1872, Japan has always emphasized the role of school education in catching up with the United States and other Western countries. Throughout the Meiji period (1868-1912), the official affirmation was that "the development of school education will contribute to the prosperity of the glorious country." Given this, school and popular education are complementary, but school education has always been considered mainstream. Subsequently, "mass education" was renamed "social education," social education was seen as an auxiliary to school education. Starting from the second half of the Meiji era, especially after the end of the Russo-Japanese War (1905), to make up for the lack of school education for young people and truly carry out social education for adults (Kawanobe, 1994).

### *1.2 After World War II: "Legislative Implementation" and "Positive Practical Promotion" in Japanese Social Education Area*

Before World War II (around 1941), social education had been widely carried out in Japan. After the end of World War II (after 1945), the focus of social education in Japan was on compensatory education and vocational skills training for young and adult women, and a series of "youth classes" and "women's classes" were created accordingly. After the war, Japan was under Allied occupation and attempted to adopt a bottom-up approach to social formation, utilizing grassroots efforts to establish new communities, rebuild depleted countries, oppose militarism, and establish an emerging democratic country. Social education was a powerful tool to connect civic activities and created new communities (Kawanobe,1994). The idea of the first Citizen Hall was proposed in 1946, supposed to serve as an activity center and hub for residents. As the infrastructure and permanent institution for social education, it was viewed as the central link for community education, leisure interaction, administrative promotion, industrial promotion, and youth place (Makino, 2017).

Subsequently, the Japanese Ministry of Education and Culture (MOESC) established the Citizens' Public Halls (Kominkan in Japanese) as a representative of social education during this period, encouraging the public to use social education facilities such as the citizen culture agency, library, museum, and sports hall to promote youth and adult education within specific communities. As a form of national rights, social education had gradually been liberated from the national spirit mobilization system centered around war before and during World War II. It had become an educational activity that all citizens participated in independently and spontaneously (Akira & Makino, 1991).

The Basic Education Law on Japan's Educational Purposes and Principles, enacted in 1947, discussed the rightful status of "adult education" in Article 7: "National and local public institutions should encourage family education and other education in workplaces and other social settings. National and local public institutions should strive to achieve educational goals by establishing libraries, museums, civic centers, and other institutions, utilizing school institutions and other appropriate methods (Thomas, 1985).

The Japanese government promulgated the Social Education Law (shakaikyōikuhō, しゃかいきょういくほう) in 1949, to support grassroots informal learning activities and clarify the concept that "social education was a legitimate right of Japanese citizens" (Akira & Makino,1991) and advocated that the national and municipal governments should make every effort to develop and operate public social education facilities so that all citizens can improve their quality of life by improving their self-cultivation. Encouraged municipal authorities to achieve educational goals through the establishment of civic centers, libraries, and museums. Conversations were conducted on the roles of government at different levels (Kawanobe,1994). Article 20 of the law explicitly stipulated: "The purpose of the Citizen's Hall was to carry out educational and scientific undertakings, provide cultural experiences for citizens through various activities. To carry out educational activities suitable for daily life and increase the social welfare of the community."

### *1.3 From the 1980s to the late 1990s: Promoting a positive shift towards "lifelong education" and "lifelong learning"*

Since the 1960s, UNESCO has promoted lifelong education, and "lifelong education" has spread within Japan. The Japanese government acknowledged that the demand for lifelong education in the country became more apparent. In 1971, the Central Education Commission, a consulting agency of the Ministry of Education, Culture, Sports, Science and Technology (MEXT), published a report suggesting that "from the perspective of lifelong education, a comprehensive adjustment of the entire education system was needed."

In 1972, UNESCO released the "Learn to Survive - Today and Tomorrow of the Educational World," advocating the concept of lifelong education and lifelong learning, which profoundly impacted the development of social education in Japan. In 1981, the Central Council for Education (CCE) of Japan issued a report emphasizing the necessity and importance of lifelong education and submitted a report on lifelong education to the Ministry of Education, Culture, Sports, Science, and Technology (MEXT), marking the beginning of the shift towards lifelong

education in Japan (Kawanobe, 1994). In 1982, the Central Education Commission discussed the original concepts of "lifelong education" and "lifelong learning" clarifying the interrelationship between the two. In fact, in Japan, from the late 1940s to the mid-1980s, "social education" (shakai kyouiku) referred to organized educational activities for adults and young people, except for primary and secondary school or higher education institutions (Kawanobe, 1994).

Although participation in these educational activities might not necessarily be related to obtaining specific vocational or professional technical qualifications, participants' motivation was to satisfy curiosity and improve their quality of life, obtain or experience pleasure (Miharu, et al, 1992). "Shougai gakushu" encompassed learning at all stages of life, whether formal, informal, or informal learning in school or daily life, covering all types of social education activities (Kawanobe, 1994). "Social education" and "lifelong learning" were the most used terms to describe adult education activities then.

In 1984, the Ad Hoc Council for Educational Reform was established as the Special Advisory Committee of Prime Minister Yasuhiro Nakasone. Its members included outstanding leaders from education and other fields and were assigned to long-term education reform. The Education Reform Special Committee lasted for three years and conducted a general review of the current education system in Japan. It submitted four recommendation reports, including a shift towards a lifelong learning system, a focus on individuality, and an emphasis on internationalization. In the summary report, it pointed out that the concepts of "lifelong education" (Shougai kyouiku in Japanese) and "lifelong learning" (Shougai gakushu). Those terms became popular in Japan in the late 1960s and were elaborated in detail during the period of rapid economic growth (Kawanobe, 1994).

The National Education Reform Special Committee aimed to systematize various opportunities for lifelong learning and create a "lifelong learning society" (Shougai gakushu shakai in Japanese), responding to social and economic changes in Japan. It advocated to improve youth issues caused by excessive competition. Advocating that future education should be based on lifelong learning as the basic premise, emphasizing the transition to a lifelong learning system, and changing the current situation of dividing the education system into school education and social education. The Ministry of Education, Culture, Sports, Science, and Technology (MEXT), known for its conservatism, stated at its end that the most basic idea of current education reform would promote the transition to a lifelong learning system actively (Miharu, et al., 1992).

From 1987 to 1988, the Ministry of Education, Culture and Sports carried out a ministerial-level restructuring based on the proposal of a temporary committee established by Prime Minister Yasuhiro Nakasone. It established a Lifelong Learning Bureau, responsible for leading the administrative department of lifelong learning reform and attempted to introduce specific policies and measures to create a "lifelong learning society." The domestic education system in Japan at that time was mainly composed of the "school education system" and the "social education system," integrating the concepts of school education and social education from a theoretical and vision level would form a lifelong learning system. However, the general idea in practice and society was that "the expansion of the social education system was a lifelong learning system"(Kawanobe, 1994). Therefore, in 1988, in order to promote the lifelong learning policy, the Ministry of Education and Culture carried out institutional reforms and reorganized the former "Social Education Bureau" into the "Lifelong Learning Bureau," which is still on par with the "Primary and Secondary Education Bureau" and "Higher Education Bureau," responsible for the formulation and promotion of specific policies and measures for the "Lifelong Learning Society" (Makino, 2012).

Subsequently, the Ministry of Education, Culture, Sports, Science and Technology and the Ministry of Trade and Industry (MITI) collaborated to develop the Law on Establishing an Implementation System and Other Measures to Promote Lifelong Learning (abbreviated as the Lifelong Learning Promotion Law). This bill was promulgated and implemented in July 1990 to support the mechanisms and methods of promoting lifelong learning in various countries. Specially designated communities formulate introductory planning provisions for lifelong learning development. Implemented the primary conditions of a lifelong learning society, especially by establishing a national lifelong learning committee and individual lifelong learning committees at the county level, would improve the framework for lifelong learning at the prefecture level (Kawanobe, 1994). As a result, how to coordinate and align the governance goals and policy directions of the Ministry of Education, Culture, Science

and Technology (MEXT) and other ministries, as well as how to apply the systems and facilities of other ministries to lifelong learning, were complex and practical. For instance, The Ministry of International Trade and Industry and the Ministry of Education jointly formulated the "Promotion of Lifelong Learning Law." They established a Lifelong Learning Policy Office within the Ministry of International Trade and Industry (Kawanobe, 1994). The Ministry of Labor planned to develop lifelong learning policies through worker centers, youth work homes, and women's work homes (Kawanobe, 1994).

According to the Lifelong Learning Promotion Law requirements, the National Central Advisory Committee for Education (NACLL) released in August 1990. Its discussed further promotes and implementation of lifelong learning policies, which would be included in the Central Council for Education (CCE) (Kawanobe,1994). The Central Committee researched essential matters related to promoting social education. The Lifelong Learning Branch was subsequently established within the Central Committee to focus on lifelong learning issues (Ogden, 2010). Shortly after that, in the same year as 1990, the Law on the Implementation System and Other Measures for Promoting Lifelong Learning (or Lifelong Learning Promotion Law) was simultaneously introduced, which stipulated the establishment of lifelong learning councils at the national and regional levels to support the promotion of lifelong learning in local areas, and the provision of lifelong learning in designated communities to investigate and evaluate the learning needs of residents. In the same year, the Council of the National Commission for Lifelong Learning approved a report entitled "Measures to Promote Lifelong Learning to Respond to Emerging Social Trends," which listed four special issues that needed to be urgently addressed: promoting regular education, promoting and supporting volunteer programs, enriching youth out of school compensation programs, and strengthening learning opportunities to address contemporary issues and human rights, aging, international cooperation, environment, food, and other issues (Ogden, 2010).

In 1990, the Japan Central Education Commission accepted the "Development of a Lifelong Learning Infrastructure" report (Kawanobe, 1994). Considering that "the foundation of lifelong learning was rooted in the voluntary will of the people, infrastructure construction was set as an urgent and important issue." It advocated for the following five steps of planning. At the national, regional, and municipal levels, a liaison and coordination structure should be prepared for the general provisions of lifelong learning (Kawanobe, 1994).

Since its establishment in 1990, the National Commission for Lifelong Learning has proposed the report "The Promotion of Measures for Lifelong Learning which corresponded to the Future Directions of Society" in 1992, calling for establishing a lifelong learning society. In 1996, the Measures to Improve Opportunities for Lifelong Learning were proposed. In 1998, the "A Future Non-Formal Education Administration that Responds to Social Changes" was proposed. In 1999, the report "Measures to Make Best Use of the Achievements of Lifelong Learning" and "Experiments in Daily Life and Nature Cultivate the Minds of Japanese Children: Measures to Enrich the Environment of Local Communities Vital for Fostering the Zest for Living of Young People" were proposed. In 2000, Measures to Promote Lifelong Learning Utilization of New Information Communication Technology was proposed (Yamada, et al., 2003).

Since 1988, Japan's economy has fallen into a "long-term depression," also known as the "lost decade," and the situation lasted until 2002. The significant reform of lifelong learning also occurred during this period. Japan's lifelong employment system has been disrupted in these ten years, and the tradition of internal employee training has lost its foundation. Subsequently, to emphasize the social responsibility of continuing education and training, the concept of lifelong learning began to take a leading role (Gordon, 1998). In contrast, the previous community education system (Shakai Kyoiku) was limited to adult education. In 1988, the Social Education Bureau under the Ministry of Education, Culture, Sports, Science and Technology was renamed the Lifelong Learning Bureau (Kawanobe, 1994). With the promulgation of the Lifelong Learning Promotion Law in 1990, various sectors in Japan gradually accepted the idea that "lifelong learning should include various social education activities." Lifelong learning activities could be conducted in companies, formal schools, community centers, libraries, museums, or many other types of facilities, including formal, informal, and informal learning. "Shô gaigakusha" (lifelong learning), the most used term in Japan to describe adult education activities since the mid-1980s, is still frequently used today.

#### *1.4 Lifelong Learning as the Main Focus of Japanese Education Policy Formulation in 21st Century*

Since the 1990s, the concept of lifelong learning has been increasingly understood in Japan. In a national opinion poll conducted in Japan in 2000, 74% of respondents were already familiar with the term. In 2001, the Ministry of Education, Culture, Sports, Science, and Technology was reorganized at the ministerial level and subsequently established the "Lifelong Learning Policy Bureau." Today, the bureau remains the central organization is responsible for coordinating and promoting lifelong learning policies. It required to plan and formulate relevant policies, conduct research and analysis on Japan's domestic and international education situation, and promote information technology reform (MEXT, 2009).

In December 2006, Japan first revised the Education Basic Law promulgated in 1947 received revision. Chapter 3 explicitly mentioned the concept of lifelong learning and added the Japanese word "shōgaigakushū" (生涯学習) translated directly into English, it corresponded to "lifelong learning" and proposed that "every Japanese citizen should establish their personality, live a prosperous life, and make appropriate use of learning achievements in order to achieve social development." Summarize the concept of lifelong learning developed by Japanese people since the late 1960s, the focus of attention shifted to "how to transform the concept of lifelong learning into specific policy measures under current socio-economic conditions" (MEXT, 2006).

In the first decade of the 21st century, lifelong learning opportunities have received support from governments at all levels. According to relevant statistics, the Ministry of Education, Culture, Sports, Science and Technology alone allocated 8.5% of its budget for lifelong learning in 2007, equivalent to 452.5 billion yen (MEXT, 2007). Achieving a lifelong learning society - Japan was steadily moving towards the goal of achieving a lifelong learning society where everyone can have the opportunity to participate in learning at any time, achieve success, and gain recognition. To achieve this goal, developing and promoting comprehensive and diverse learning opportunities was necessary. The Ministry of Education, Culture, Sports, Science, and Technology (MEXT) stated that this would contribute significantly to human resource development and the overall development of society and the economy. Promoting social education and supporting family education were mentioned (Ogden, 2010).

In order to implement the lifelong learning concept advocated in the revised Basic Law of Education, the Lifelong Learning Department of the Central Education Reform Commission submitted a report titled "Measures to Promote Lifelong Learning and Create an Innovative Era: Aiming to Create a Knowledge Oriented Society" to the Ministry of Education in February 2008. The report simulated three social development predictions: a knowledge-based society, an independent community, sustainable social development and a knowledge circular (Chukyoshin, 2008).

In 2009, the Ministry of Education and Culture redefined "lifelong learning," stating that it included two main aspects: "a comprehensive review of the concepts of various systems, including education, to establish a lifelong learning society and connect learning concepts at all stages of life." Lifelong learning included not only structured learning through school and social education, but also learning through everything (MEXT, 2009).

In August 2009, the former ruling party of Japan, the Liberal Democratic Party, lost its position in the House of Representatives (Lower House) during the general election, while the Democratic Party won a majority of seats and became the ruling party. The Democratic Party attempted to promote the process of policy-making democratization by inviting ordinary people to participate in policy discussions, known as "deliberative democracy." The Democratic government conducted a thorough screening program to reduce the national budget and focused more on employment policies and childcare (Makino, 2012). During this period, the budget for promoting lifelong learning was further reduced, directly resulting in the focus of lifelong learning being limited to vocational education and training.

In June 2010, the Japanese Cabinet approved the "New Growth Strategy: Revitalizing Japan" and set seven strategic goals to be achieved by 2020. The "Education and Lifelong Learning Goals" involved increasing the number of adult students in domestic universities and professional universities to 90000 and 150000, respectively, and increasing the number of self-employed individuals engaged in self-directed learning (Makino, 2012).

In June 2013, the Japanese Cabinet approved the "Second Basic Plan for Education Promotion" while debating the education administrative network and attempting to provide a detailed explanation of the concept of "network management in a lifelong learning society" proposed by the National Commission for Lifelong Learning in 1998 (Committee for Lifelong Learning of Central Education Council, Ministry of Education, 1998), in which social education would deviate from the conventional category, Linking with the policies of the market and various administrative regions, and reconnecting with the boundaries of school education and family training within existing education administrators (Dai 2-ki Kyoiku Shinko Kihon Keikaku, 2013).

In December 2015, the Ministry of Education and Science simultaneously released three reports from the Central Education Commission: The Community School Cooperation Report, the Team School Report, and the Educator Skills Improvement Report, all of which contained basic value (Sub-committee for Curriculum Planning in Elementary and Middle Schools of Central Education Council, Ministry of Education, 2015)

A report led by Hir Hase, then Minister of Education of the Ministry of Culture, Culture, Science and Technology in February 2016, also known as the "Hase Plan," called for cooperation between schools and communities on common goals for children's development. The plan utilized the school guidance committee to involve regional residents in school operations and placed the education coordinator to be responsible for coordinating with the local community. In addition, extracurricular activity coaches and teaching supervisors could be recruited from the community (Central Education Council, Ministry of Education, 2015a). Integrated into active learning, making the school full of learning fun, and transformed into a vibrant place (Central Education Council, Ministry of Education, 2015b). Schools would become the central focus of children's growth, rather than just providing children's education in schools, but widely engaging with residents. Providing children with diverse experiences also influenced local citizens - all residents were responsible for the local (Central Education Council, Ministry of Education, 2015c).

In August 2019, the Japanese Ministry of Education, Culture, Sports, Science and Technology revised the Implementation Regulations of the School Education Law, granting credits and providing training certificates for courses related to "return to education." In 2020, Japan officially launched a portal website that supported learnings, providing courses and lectures for graduates. Universities and specialized schools implemented "return to education" promotion projects with the goal of employment and career transition. In December 2021, Japan established the "Education Future Creation Conference" with the primary purpose of "cultivating talents who shoulder the future of the country." The conference aimed to enhance the diversity and flexibility of the connection between education and society. It called for the construction of a lifelong learning society for all generation and "lifelong ability development." Starting in 2021, the Japanese Cabinet Office, the Ministries had held relevant provincial liaison meetings on promoting "return to education." The fourth edition of Japan's Basic Plan for Education Revitalization, released in 2023, to discuss and coordinate the further act (Liu, Zhang, 2024).

## **2. The Path of Local Community Education and Lifelong Learning in the 21st Century**

### *2.1 Universities and Student Volunteers Entering Communities: A Case Study in Takasaki City, Gunma Prefecture*

The Takasaki Citizen Hall, located in Kura Buchi District, Takasaki City, is nearly a 40-minute drive from the city center. It is essential for communication and cooperation between universities, students, local farmers, and the Takasaki City Government. The urban government and the industrial department serve as promoters community integration. Universities and undergraduates serve as researchers and volunteers to organize workshops for local farmers and policymakers. There is a Cafe, which student and community volunteers manage daily. It provides community interaction space and publishes job information within the area (Sawano, 2012).

### *2.2. Multi-Generational Community: A community in Kashi, Chiba Prefecture*

A community in Kashiwagi, Chiba Prefecture, is a suburban development in Tokyo. Establish a community café as a center for multi-generational community formation, operated by residents and included in the plan to create a

community liaison and interaction center. The launch of a multi-generational community guidance committee to involve local elderly people. Prepare seminars on elderly development. Increase interaction between children and the elderly and set this as the first step in restructuring local interpersonal relationships. Residents in the café can chat and take a drink. Volunteers regularly post job information. Children can come to take a break and do homework before and after school. Elderly people also play the role of traffic policer (Makino, 2017).

### *2.3 Knowledge Recycling and Reuse in Regional Citizen Universities and Community*

To establish a knowledge-circular society through promoting lifelong learning, balancing individual and social needs, coordinating social and economic values, and promoting the circular utilization of knowledge within the community would further activate the flexibility of existing knowledge systems. The sustainable development system of the entire society needs to be built within local communities. The local Japanese community contains many practices of knowledge recycling (Makino, 2017).

## **3. Construction and application of lifelong learning facilities in Japan**

### *3.1 Forms of lifelong learning in Japan*

The forms of lifelong learning can be divided into three categories: formal, informal, and non-formal. There are various types of informal lifelong learning, include ① Continuing education program, night courses, and correspondence courses, provided by higher education institutions for adults. ② The company implements employee training programs, and also entrusts the education of its employees to specialized vocational education and training institutions to provide learning opportunities (Kawanobe, 1994).

### *3.2 Lifelong learning providers in Japan*

Overall, the attributes of lifelong learning opportunity providers in Japan can be divided into four categories: public education institutions such as schools and higher education institutions, companies and vocational education institutions, civic education public places and social education centers, and private education institutions (such as cultural centers). Lifelong learning facilities funded by the Japanese government include citizen museums (Kōminkan), libraries (Toshokan), museum (Hakubutsukan), sports centers (Taiikukan), Lifelong Learning Center (Shōgaigakushūsentā), Women's Education Center, and Open University of Japan (Hōsōdaigaku). Private lifelong learning service providers (Karuchāsēntā) also exist. Most cultural centers operated by newspaper publishers and department stores primarily aim for housewives. In addition, many non-profit organizations established under the so-called NPO law promulgated in 1998 chose "social education" as one of their areas of activity when registering, and most of these social education non-profit organizations are funded by local governments.

#### *3.2.1 Japanese civic universities*

The development history of Japanese civic universities can be divided into four stages. The first stage occurred from the late 1970s to the 1980s, during which there were only a few civic universities, including Kiyomigata Daigakujuku in Okayama Prefecture, Kichijoji Zatsugakujuku in Tokyo, and Kamakura Shimin Akademia in Kanagawa Prefecture. The scale and number of participants in these schools are tiny (Sawano, 2012). The second stage began in the first half of the 1990s, when Japan had just experienced the collapse of the economy, leading to deflation and unemployment. During this period, civic universities such as TAMA Shiminjuku and Sumida Laaningu Gaaden in Tokyo, Japan, focused on trivia, and the Daikoukai Seminaa at Asunaro University in Kanagawa Prefecture established during this period. The number of participants is also increasing with the increase in civic universities. Many learners who have previously completed regular lecture participated in (Sawano, 2012). The third stage began in 2000, when many civic universities were established independently of local governments. These included the Adachi Rakugakukai Society in Tokyo's Ashikaga Ward, the Hachiouji Gakkai Society in Tokyo, and the Shibuya Network University in Tokyo. Most of them were operated by non-profit organizations



(NPOs). The number of citizen universities in Japan continued increasing, and the growth rate in this stage was no longer as rapid as in the second stage (Sawano,2012). According to 2010 statistics, there were approximately 150 civic universities in Japan, which were informal educational institutions that regularly offer various lectures and courses. The fourth stage is nowadays when citizens of all ages can participate in these universities. They may have names as urban (rural) universities, community colleges, civic colleges, civic tutoring schools, community universities or free universities, some of which are organized by local governments, and some are private funded (Sawano, 2012).

### 3.2.2 Online transmitter of lifelong education

According to the methods of providing lifelong learning opportunities, there are mainly face-to-face courses and on-site activities, as well as some correspondence courses (tsūshinkyōiku, including courses based on cable TV and the Internet, which are mainly provided by the University of the Air (originally named the University of the Air, later renamed the Open University of Japan, OUI, 放送大学), the Education Information Satellite Communication Network Institute (EL-NET).

The University of the Air, founded in 1983, accepted student registration in 1985 and is open to all without the need for regular entrance exams. Students can register for non-degree or degree courses on public television, radio and internet. As of 1991, 35000 students had registered, and as of the second semester of 1990, there were 1951 graduates. The number of registered students in 2007 was 89422. In 2007, it was renamed as an Open University in the English language and transformed into a four-year undergraduate degree-granting institution, allowing students to receive courses anytime and anywhere. The master's program was established in April 2013, and the doctoral program was established in October 2014 (Ogden,2010). Students of the Open university of Japan are from both domestic Japan and foreign countries. The Open university of Japan focuses on expanding cooperation with domestic and foreign universities (Zhao & Ji, 2022). The Open University of Japan and The Aomori University Sign a Credit Exchange Agreement in 2019. As of 2020, The Open University of Japan has signed credit exchange agreements with 401 domestic universities in Japan, with cooperative institutions accounting for over 35% of the total number of domestic universities in Japan. After revising the School Education Law, The Open University of Japan collaborated with vocational colleges. Currently, there are 50 specialized schools have signed a memorandum of cooperation with The Open University of Japan. The Open University of Japan and The Karatsu Business College signed a memorandum of cooperation in 2021.

The College of Education Information Satellite Communication Network (EL-NET) was established in 1999 and broadcasts various information related to education, culture, and sports nationwide. EL-NET provides training for educators, children's education programs, and university promotion courses (The Open University of Japan, n.d.).

## 4. Lifelong Learning and the Revitalization of Society and Local Communities

In the context of significant social and economic changes, lifelong learning becomes increasingly important at various stages of life. Increase a lifelong learning society, increase opportunities for lifelong learning both online and offline can withstand the risks of fewer children, aging, and a sharp decline in population dividends, maximizing everyone's skills and personalities, improving education levels, and enhancing human resource utilization. This is crucial for Japan's economy and society (Gender Equality Learning Division, Lifelong Learning Policy Bureau, n.d.).

In addition, considering citizens' independence and coexistence, lifelong learning activities are links between local areas, residents, businesses, and non-profit organizations. Meanwhile, with the arrival of an aging society, expanding lifelong learning is an essential livelihood project for the well-being of the elderly (Gender Equality Learning Division, Lifelong Learning Policy Bureau, n.d.).

Globalization brings rapid changes in industries and employment. Workers need to master and refresh vocational skills lifelong (Lifelong Learning Promotion Division, Lifelong Learning Policy Bureau,n.d.).The wealth gap and

poverty issues become prominent due to the increasing informal employment and corporate bankruptcy. Lifelong learning can expand education and training, support individuals in acquiring knowledge and skills, and help them achieve economic independence (Gender Equality Learning Division, Lifelong Learning Policy Bureau, n.d.).

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# Enhancing Writing Skills Through PBL at Higher education Institutions: A case Study

Mariam Kilanava<sup>1</sup>

<sup>1</sup> Foreign Language Department, The State Teaching university of Physical Education and Sport, Tbilisi, Georgia

Correspondence: Mariam Kilanava. The State Teaching university of Physical Education and Sport, Tbilisi, Georgia. Tel: +995 551 21 27 39. E-mail: mariam.kilanava@sportuni.ge

## Abstract

This article explores the imperative of enhancing writing skills among students enrolled in research skill courses at Higher Education Institutions (HEIs) and investigates the integration of Project-Based Learning (PBL) as a pedagogical strategy to achieve this goal. Drawing upon existing literature, the study synthesizes theoretical frameworks and practical insights to contribute to the discourse on writing instruction in higher education. The research methodology involves a mixed-methods approach, encompassing both qualitative and quantitative analyses, to comprehensively assess the impact of PBL on students' writing proficiency, academic rigor, and presentation skills. The findings highlight significant improvements in writing abilities among international medical faculty students engaged in PBL activities, emphasizing the transformative potential of this innovative pedagogical approach. The study underscores the importance of intensive engagement in PBL activities for fostering writing proficiency and academic development, while also elucidating the multifaceted benefits of PBL in promoting critical thinking, collaboration, and effective communication skills. The conclusion discusses the implications of the findings and suggests avenues for future research in the field of writing instruction and pedagogy in higher education.

**Keywords:** PBL, Writing Skills, Research Skill Courses

## 1. Introduction

In the realm of Higher Education Institutions (HEIs), the cultivation of proficient writing skills among students enrolled in research skill/academic writing courses stands as an imperative endeavor. Academic writing serves as the cornerstone of scholarly communication, facilitating the dissemination of knowledge, the exchange of ideas, and the advancement of academic discourse. The importance of nurturing effective writing abilities among students cannot be overstated, as it underpins academic success, professional development, and intellectual growth. The significance of enhancing writing skills among students enrolled in research skill courses at HEIs is multifaceted and far-reaching. Firstly, proficiency in academic writing is a prerequisite for academic success across disciplines. Whether students are conducting empirical research, analyzing theoretical frameworks, or critiquing scholarly literature, the ability to express oneself clearly and cogently through written discourse is

essential. Strong writing skills enable students to craft well-structured arguments, provide evidence-based reasoning, and engage with academic debates in a manner that is both rigorous and persuasive.

Despite the undeniable importance of enhancing writing skills among students in research skill courses, educators often face challenges in effectively fostering writing proficiency within traditional classroom settings. Conventional instructional methods, characterized by lectures, readings, and exams, may fall short of providing students with authentic opportunities to apply writing skills in meaningful contexts. As such, there arises a need for innovative pedagogical approaches that can bridge the gap between theory and practice, engage students actively in the writing process, and foster a culture of writing excellence within HEIs.

One such pedagogical approach that holds promise in this regard is Project-Based Learning (PBL). Grounded in principles of inquiry, collaboration, and authentic assessment, PBL offers a dynamic framework for integrating writing instruction into research skill courses. By engaging students in inquiry-driven projects that require them to conduct research, analyze data, and communicate findings through written reports or presentations, PBL provides a scaffolded environment for developing and practicing writing skills in a context that is both relevant and meaningful.

This article seeks to explore the importance of enhancing writing skills among students enrolled in research skill courses at HEIs and examine the possibilities of incorporating Project-Based Learning as a pedagogical strategy to achieve this objective. By synthesizing existing literature, exploring theoretical frameworks, and providing practical insights, the article aims to contribute to the ongoing discourse surrounding writing instruction in higher education and offer recommendations for educators seeking to enhance writing proficiency among their students. The research questions put within the study aim to contribute to the ongoing discourse surrounding writing instruction in higher education by examining the role of PBL as a pedagogical strategy for enhancing writing skills among students enrolled in research skill courses.

**RQ 1-** How does the integration of Project-Based Learning (PBL) alongside conventional teaching methodologies impact the writing aptitude?

**RQ 2-** What are the perceived benefits and obstacles associated with the incorporation of PBL within research skill courses for enhancing writing competence among students, as observed in the study?

**RQ 3 -** How do students' levels of engagement in PBL activities correlate with improvements in writing proficiency, academic rigor, and presentation skills among students?

## **2. Literature Review**

PBL has emerged as a dynamic pedagogical methodology within higher education institutions (HEIs) with the potential to enrich students' writing skills. Synthesizing various scholarly inquiries illuminates the multifaceted dimensions of PBL, unveiling its significance in nurturing self-directed learning, bolstering motivation, incorporating technology, and addressing educational crises. Kokotsaki, Menzies, and Wiggins (2016) underscore the capacity of PBL to foster student engagement, collaboration, and deeper comprehension of subject matter, culminating in enhanced academic performance and the cultivation of critical thinking and communication proficiencies. Klopfenstein (2003) delves into strategies for empowering learners through self-directed learning, a pivotal facet of project-based methodologies, enabling students to exercise autonomy and accountability in their educational pursuits, including writing endeavors. Baines (2014) offers a specialized perspective on project-based writing in the domain of science education, emphasizing its potential to amalgamate disciplinary content with the enhancement of writing competencies. Blumenfeld et al. (1991) delve into the motivational underpinnings of project-based learning, stressing the necessity of sustained engagement and robust support structures for optimal student learning outcomes. This seminal work lays the groundwork for comprehending the socio-cognitive dynamics inherent in PBL environments, elucidating the role of collaboration, feedback mechanisms, and authentic task assignments in facilitating profound learning experiences. Hasani (2016) scrutinizes the effectiveness of contextual teaching and learning in fortifying argumentative writing skills, providing valuable insights into instructional strategies that complement project-based methodologies. Maltesse (2012) curates a repertoire of project-based learning activities tailored to suit the needs of 21st-century learners, furnishing

educators with practical tools to deploy innovative teaching techniques. Kusmiyati (2020), through comparative analysis, accentuates the merits of experiential, inquiry-based approaches over direct instruction in nurturing writing skills development. Meanwhile, Affandi and Sukyadi (2016) probe into the influence of PBL and problem-based learning on the writing attainment of English as a Foreign Language (EFL) students, underlining the pivotal role of authentic tasks and collaborative inquiry in advancing language proficiency. Assaf (2018) explores the utility of PBL in motivating language learners amidst crises, spotlighting its relevance in fostering resilience and adaptability. Belagra and Draoui (2018) examine the integration of information and communication technology into project-based learning frameworks, accentuating its potential to bolster student engagement and motivation.

Project-based learning is a dynamic educational approach in higher education that enhances writing skills. Synthesizing various studies reveals PBL's role in fostering self-directed learning, motivation, technology integration, and crisis management. Scholars emphasize PBL's ability to engage students, deepen understanding, and improve academic performance. Strategies like self-directed learning empower students to take charge of their education, including writing projects. PBL also integrates disciplinary content with writing skills and motivates students through sustained engagement and support. Contextual teaching enhances argumentative writing, while innovative activities cater to 21st-century learners. Comparisons with direct instruction highlight the effectiveness of inquiry-based approaches. PBL and problem-based learning benefit language learners, especially with authentic tasks and collaborative inquiry. Moreover, PBL proves valuable in motivating learners during crises and integrating technology for enhanced engagement.

### 3. Methodology

This study aimed to investigate the integration of Project-Based Learning (PBL) with standard teaching methods to enhance writing skills among 120 international medical faculty students enrolled in a research skill course at a private university in Georgia. The research employed both qualitative and quantitative methods to comprehensively assess the impact of PBL on students' writing proficiency and performance.

#### 3.1. Participant Selection and Characteristics

The participants consisted of 120 international medical faculty students who were actively enrolled in a research skill course at the private university. These students were chosen due to their enrollment in the course, which focused on developing research skills essential for academic and professional success in the medical field. The sample encompassed students from diverse cultural and linguistic backgrounds, reflecting the international nature of the university's student body.

#### 3.2 The stages of the study

The research comprised three distinct phases: initial, intermediate, and final. In both qualitative and quantitative methodologies, students underwent inquiry at each juncture, with their written submissions subject to evaluation. In the quantitative framework, participants responded to targeted inquiries at every stage, offering responses categorized as either "yes," "no," or "somewhat." the questions for each stage were the following:

##### **Initial Stage** (Identifying Needs):

1. Did participating in the initial writing assignment help you identify areas in which you needed to improve your academic writing skills?
2. Did conducting real surveys as part of the initial writing assignment provide valuable insights into your writing needs?
3. Did the initial writing assignment contribute to your understanding of the importance of academic writing skills in research skill courses?

##### **Intermediate Stage** (Intermediate evaluation)

Do you feel that your writing skills have improved since the initial writing assignment?

Did conducting real surveys again as part of the intermediate writing assignment help you assess your writing improvement?

Do you believe that the feedback received during the intermediate stage contributed to your writing improvement?

### **Final Stage (Results)**

Do you think your writing skills have significantly improved since the beginning of the course?

Did conducting real surveys for the final assignment help you apply the writing skills you've developed throughout the course?

Do you feel confident in your ability to communicate research findings effectively through writing after completing the final assignment?

For the qualitative aspect of the study, the written assignments underwent assessment based on several criteria. These included the structural integrity of the papers, coherence within paragraphs, adherence to principles of academic integrity to prevent plagiarism, proficiency in conducting surveys and analyzing data within the framework of a project, demonstration of effective presentation skills, and the application of Project-Based Learning principles throughout the assignments.

### *3.2 Integration of Project-Based Learning*

Project-Based Learning (PBL) was integrated into the research skill course to provide students with authentic opportunities to enhance their writing skills through practical projects. The PBL approach involved assigning students tasks that required them to engage in research, data analysis, and written communication. Tasks were given three times during the semester: first as a beginning, second as an intermediate stage to monitor progress and provide feedback, and then as a final activity to evaluate overall performance. Each writing task encompassed essential aspects of research skills/academic writing, including conducting surveys, administering questionnaires, conducting interviews, and exploring medicine-related topics. Students were provided with encouragement to delve into subjects that aligned with their personal interests and academic endeavors, thereby nurturing a sense of independence and drive, facilitating the expression of their individual perspectives and preferences (voice and choice). The culmination of each task was the delivery of a final assignment in the form of a 5-7 page paper, accompanied by a presentation to the class.

### *3.3. Assessment and Data Collection*

Of the 120 participating students, 112 actively engaged in the PBL activities throughout the semester, completing both initial, intermediate and final tasks. The remaining students, facing visa-related challenges, often missed lectures and participated only in the final project. This dichotomy in student engagement provided a unique opportunity to compare the effectiveness of intensive versus less-intensive participation in PBL activities.

The data collection process employed a combination of qualitative and quantitative methodologies. Initially, students were tasked with composing a brief article at the semester's onset, serving as a means to evaluate their initial research skill/academic writing proficiency. These initial articles established a baseline against which students' progress throughout the semester could be measured. Subsequently, at an intermediate stage, students undertook another writing assignment, allowing for a more detailed assessment of their performance. Finally, at the study's conclusion, students' final papers and presentations were assessed to determine improvements in writing skills, academic rigor, and presentation abilities.

### *3.4. Structure and Implementation of PBL*

The integration of PBL into the research skill course was structured around five key aspects to ensure its successful implementation: 1) Identifying Student Learning Needs - The initial writing task provided insights into students' writing skills and served as a basis for tailoring subsequent activities to address specific learning needs. 2. Planning

- according to the results the following steps were planned tailored to the students' needs 3. Specific Learning Activities - Topics related to medicine were carefully selected by the students to align with course objectives and provide students with opportunities to conduct authentic research within the university community. 4. Sequencing Activities- Students received guidance and feedback from the professor throughout the writing process, ensuring that tasks were sequenced logically and scaffolded appropriately. 5. Timetable Generation - Clear deadlines were established for submitting intermediate and final papers and presentations, allowing students to manage their time effectively and track their progress. 6. Planning for Conclusion - The culmination of the PBL activities was marked by a conference-style presentation session, where students shared their research findings and conclusions with their peers.

### 3.5 Enhancement of PBL Aspects Among Students

The study aimed to enhance several key aspects of PBL among students: a) Need to Know - Detecting the Problem: Students were tasked with identifying and addressing problems related to their chosen topics, fostering critical thinking and problem-solving skills. b) Voice and Choice: Students were given autonomy to select topics of interest and modify them as needed throughout the semester, empowering them to take ownership of their learning experiences. c) Authenticity in Writing: Collaborative research activities, including face-to-face interviews, questionnaires, and surveys, enabled students to generate authentic data and draw evidence-based conclusions in their writing. d) Demonstration of Knowledge: Students demonstrated their understanding and mastery of academic writing conventions through the submission of written papers and the delivery of presentations, showcasing their ability to communicate research findings effectively.

### 3.6. Assessment Approach

It is important to note that assessment of students' performance in PBL activities was formative rather than summative (accept for the final stage, the end of the semester assignment). This approach allowed for ongoing feedback, reflection, and iterative improvement throughout the semester, emphasizing the process of learning and growth rather than solely focusing on outcomes.

## 4. Results

The study results could show the following data:

Table 1: Quantitative data

Stage	Question	Yes	No	Somewhat
Initial	Identified need for writing improvement after assignment completion	98 (81.67%)	20 (16.67%)	2 (1.67%)
	Found real surveys insightful for writing needs during initial assignment	102 (85%)	16 (13.33%)	2 (1.67%)
	Believed initial assignment contributed to understanding academic writing importance	115 (95.83%)	4 (3.33%)	1 (0.83%)
Intermediate	Assessed improvement in writing skills since initial assignment	110 (91.67%)	10 (8.33%)	-
	Found real surveys helpful for assessing writing improvement in intermediate assignment	105 (87.5%)	14 (11.67%)	1 (0.83%)



	Believed feedback during intermediate stage contributed to writing improvement	108 (90%)	11 (9.17%)	1 (0.83%)
Final	Perceived significant improvement in writing skills since beginning of the course	115 (95.83%)	4 (3.33%)	1 (0.83%)
	Found real surveys helpful for applying writing skills in final assignment	110 (91.67%)	-	10 (8.33%)
	Felt confident in ability to communicate research findings effectively through writing after completing final assignment	112 (93.33%)	-	8 (6.67%)

Table 2: Qualitative data

Stage	Aspect of Writing skills		
Initial	Article structure, survey conducting, forming research questions, cohesion, academic writing style, presentation skills	108 out of 120 students (90%)	-
Intermediate	Comparison with initial stage	54 out of 120 students (45%)	45%
Final	Comparison with initial and intermediate stages	16 out of 120 students (13.33%)	86.67%

#### 4.1 Impact of PBL on Writing Proficiency

Quantitative data underscored notable improvements across various stages of the study. Initial assessments revealed that a majority of students recognized the need for improvement in their writing skills after completing the assignment, with 81.67% acknowledging this necessity. Furthermore, 85% of students found real surveys conducted during the initial assignment insightful for identifying their writing needs. These findings elucidate the efficacy of PBL in fostering self-awareness and identifying areas for improvement in academic writing skills. At the intermediate stage, 91.67% of students reported an enhancement in their writing skills since the initial assignment, indicating tangible progress. Moreover, 87.5% found conducting real surveys during the intermediate assignment beneficial for assessing their writing improvement, highlighting the practical utility of hands-on experiences in refining writing skills. In the final stage, 95.83% of students perceived a significant improvement in their writing skills since the beginning of the course, affirming the long-term impact of PBL on writing proficiency. Additionally, 91.67% acknowledged the instrumental role of real surveys in applying acquired writing skills during the final assignment, emphasizing the transferability of skills acquired through PBL activities.

#### 4.2 Qualitative Insights into Writing Enhancement

Qualitative analysis revealed substantial improvements in various aspects of academic writing, including organization, coherence, clarity, and argumentation. Students demonstrated enhanced proficiency in articulating ideas effectively, synthesizing information, and presenting evidence-based arguments in their written reports. This underscores the efficacy of PBL in fostering critical thinking and effective communication skills among participants.

#### *4.3 Effectiveness of Intensive Engagement in PBL Activities*

A comparative analysis between students extensively engaged in PBL activities and those less involved due to visa-related challenges underscored the importance of intensive engagement in fostering writing proficiency. Students actively participating in PBL activities showcased greater improvements in writing skills, as evidenced by the quality of their final papers and presentations. The iterative nature of PBL, characterized by ongoing feedback and revision, facilitated progressive refinement of writing skills throughout the semester.

#### *4.4 Academic Rigor and Presentation Skills*

In addition to improvements in writing proficiency, students engaged in PBL activities demonstrated enhanced academic rigor and presentation skills. The integration of research tasks, data analysis, and evidence-based argumentation within the PBL framework encouraged students to approach writing assignments with depth and critical thinking. Furthermore, culminating presentation sessions provided students with opportunities to effectively communicate research findings, bolstering their oral communication skills.

### **5. Discussion**

The findings of this study illuminate the transformative potential of integrating Project-Based Learning (PBL) with conventional teaching methodologies to enhance writing skills among the students. Through a comprehensive examination of both qualitative and quantitative data, this discussion seeks to elucidate the implications of these findings and offer insights into the effectiveness of PBL in fostering writing proficiency, academic rigor, and presentation skills among participants. The majority of students acknowledged the need for improvement in their writing skills following the initial assignment, demonstrating a heightened awareness of their academic writing needs. This underscores the efficacy of PBL in promoting self-awareness and identifying areas for growth in writing proficiency. Moreover, the consistent trend of improvement observed across the stages of the study suggests that PBL facilitates continuous development in writing skills, as evidenced by the high percentage of students reporting enhanced writing abilities at each stage. Qualitative analysis complemented the quantitative findings by providing nuanced insights into the specific aspects of writing that experienced improvement. Students demonstrated enhanced organizational skills, coherence, clarity, and argumentation in their written/oral reports, indicative of a deeper understanding of academic writing conventions. These findings underscore the efficacy of PBL in fostering critical thinking and effective communication skills, essential attributes for academic and professional success.

A comparative analysis between students extensively engaged in PBL activities and those less involved highlighted the importance of intensive engagement in fostering writing proficiency. Students actively participating in PBL activities exhibited greater improvements in writing skills, emphasizing the role of sustained engagement and practice in skill development.

### **6. Conclusion**

The integration of Project-Based Learning (PBL) into research skill courses at Higher Education Institutions (HEIs) presents a promising avenue for enhancing writing skills among international medical faculty students. Through a rigorous examination of both qualitative and quantitative data, this study has demonstrated the transformative impact of PBL on students' writing proficiency, academic rigor, and presentation skills.

The findings underscore the effectiveness of PBL in promoting self-awareness and identifying areas for improvement in writing skills among students. By providing authentic opportunities for inquiry, collaboration, and reflection, PBL enables students to develop essential writing competencies while engaging meaningfully with course content. The iterative nature of PBL, characterized by ongoing feedback and revision, facilitates progressive refinement of writing skills throughout the semester. Moreover, the study highlights the multifaceted benefits of PBL in fostering critical thinking, collaboration, and effective communication skills among participants. Students engaged in PBL activities demonstrated enhanced organizational skills, coherence, clarity, and argumentation in

their written reports, indicative of a deeper understanding of academic writing conventions. Additionally, culminating presentation sessions provided students with opportunities to effectively communicate research findings, thereby strengthening their oral communication skills. By continuing to investigate innovative pedagogical approaches, educators can better prepare students for success in both academic and professional contexts, thereby advancing the goals of scholarly communication, knowledge dissemination, and intellectual growth within the realm of higher education.

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