

# Education Quarterly Reviews

Maleta, C., Kambewa, P., Kayambazinthu, E., & Chigeda, A. (2023). Education Development Programming: Responsiveness and Adaptability of the Implementation of the Malawi National Reading Programme in Lungwena, Mangochi District. *Education Quarterly Reviews*, 6(3), 202-209.

ISSN 2621-5799

DOI: 10.31014/aior.1993.06.03.774

The online version of this article can be found at: https://www.asianinstituteofresearch.org/

Published by:

The Asian Institute of Research

The *Education Quarterly Reviews* is an Open Access publication. It may be read, copied, and distributed free of charge according to the conditions of the Creative Commons Attribution 4.0 International license.

The Asian Institute of Research *Education Quarterly Reviews* is a peer-reviewed International Journal. The journal covers scholarly articles in the fields of education, linguistics, literature, educational theory, research, and methodologies, curriculum, elementary and secondary education, higher education, foreign language education, teaching and learning, teacher education, education of special groups, and other fields of study related to education. As the journal is Open Access, it ensures high visibility and the increase of citations for all research articles published. The *Education Quarterly Reviews* aims to facilitate scholarly work on recent theoretical and practical aspects of education.





The Asian Institute of Research Education Quarterly Reviews

Vol.6, No.3, 2023: 202-209 ISSN 2621-5799

Copyright © The Author(s). All Rights Reserved DOI: 10.31014/aior.1993.06.03.774

# Education Development Programming: Responsiveness and Adaptability of the Implementation of the Malawi National Reading Programme in Lungwena, Mangochi District

Chikondi Maleta<sup>1</sup>, Patrick Kambewa<sup>2</sup>, Edrinnie Kayambazinthu<sup>3</sup>, Anthony Chigeda<sup>4</sup>

- <sup>1</sup> University of Malawi, School of Education
- <sup>2</sup> University of Malawi, School of Economics
- <sup>3</sup> University of Malawi, Language Department
- <sup>4</sup>University of Malawi, School of Education

Correspondence: Chikondi Maleta. Email: chikmaleta@hotmail.com

### Abstract

The study assessed the implementation of the Malawi nation reading Programme's theoretical grounding and its localisation based on context. The methodology included a standardised reading assessment that tested the ability of children to read and regressed contextual factors to examine how they contributed to the reading skills of pupils. Results showed that the programme was well grounded in theory but lacked awareness of the implementation context. Therefore, the study recommends a balance of effort and investment in the implementation of reading programmes for optimal and sustained reading skill gains by pupils.

Keywords: Reading, Planning, Education, Context

### 1. Introduction

The past two decades have seen a focus in education development programming on the teaching of reading. Reading has been rightly placed as a foundational skill required for learning (UNESCO, 2017). Like in many African countries, Malawi has had a fair share of experiences developing her reading programme that has fundamentals of the teaching of reading in design. The Malawi Reading Programme follows a phonics approach anchored by the 5 T's for effective reading instruction (Teaching, Time (Ministry of Education, 2016), Text (Anderson, R.C., Wilson, P.T., & Fielding, L.G.,, 1986), Tongue (Langer, 2010; Kachiwanda, 2010), Test). The phonics approach in Malawi has followed a transitional approach where students are taught to learn the letters, sound them, add them for syllables, use the syllables in familiar and non-familiar word reading, apply comprehension strategies, and qualify as readers above-set thresholds. The teaching instruction for respective grades is highly scripted and teachers implement it with fidelity across Primary Schools in Malawi.

Notwithstanding the insulated approach on the programming of the reading intervention in Malawi, its universalization, and other household factors found to influence the ability of children to read were not pre-

programmed to complement the approach stated above. It is unclear how policy decisions from the generated evidence inform collaborative learning and adaptability on the development and implementation of reading interventions.

Gaps in knowledge identified above were therefore examined in a reading assessment conducted in Mangochi District in Malawi that sought to understand the relationship between acquisition of reading skills and household factors that would further inform education development programming focus as it relates to the Malawi National Reading Programme and other programmes developed and implemented similarly in countries such as Ethiopia and Liberia (De Stefano, J., Slade, T., & Korda, M., 2013; Chiapetta, M., 2013; Piper B., 2010).

# 2. The theoretical and empirical literature

Reading programme in Malawi has followed the universally proven efficient phonics approach (Roberts, 1994), (Richards, J.C and Willy A. Renandya, 2002), and (USAID, 2016). This has been complemented by the basic elements that support the delivery of a phonics-based reading approach focusing on teaching, time, text, tongue, and test (Gentaz, E., Sprenger, L & Theure A.,, 2015) and (Piper B., 2010). However, the deployment of the phonics approach left out key elements that support learning of reading at the household level. Therefore, one cannot conclusively attach the magnitude of reading gains to the phonics approach alone.

Studies that have been conducted on effects of household factors on learning have identified language used at home (Nagarajan, Gonzalez & Hur, 2017) and (Harrington & Sawyer, 1992; Dickinson & McCabe, 2002), meals taken by pupils (Howard, 2010), time a learner is read to at home (Roundy and Roundy, 2009; Pang, Muaka, Bernhardt and Kamil, 2010; Mastropieli, Leinart and Scruggs, 1999; Denton, Anthony, Parker, and Hasbrouck, 2004) as among other factors that predict the ability of pupils to learn reading. While literature points to the complementarity of these factors, reading programmes implemented in the past two decades have largely focused investments and attention on phonics instruction as key in the learning of reading predictors are considered as leverage to reading skill gains in pupils as an approach leaving out focus on complementing factors. This withstanding, programming for the reading interventions has been cast on the phonics enablers, leaving out complementary factors to the phonics-led reading approach. Nonetheless, the programming of reading interventions does not invest in preconditions that sustain reading gains and increase the achievement margins, regardless of well-researched theoretical underpinnings guiding the development of reading programmes.

As for Malawi, the national reading programme implementation has followed a similar trend described above. This is where, evidence is generated on household enablers of learning reading, but investment decisions do not change in line with evidence (Nagarajan, Gonzalez & Hur, 2017).

In the absence of a case study on a combined investment that has tackled the underpinning theoretical approach in reading programmes together with investments in the complementary factors mentioned above, assessments have stopped at pointing to what factors makes a difference e.g. parent education (Zambrana, K. A., Hart, K. C., Maharaj, A., Cheatham-Johnson, R. J., & Waguespack, A., (2019)), home reading environment (Elsje van Bergen Titia van Zuijen Dorothy Bishop Peter F. de Jong, 2016) and parental status (Kaluge, Kustiani & Indawati, 2019). The granular details on these broader factors would present an opportunity for more focused attention and inclusion in programming reading interventions that are specific to the context, optimizes value for money on itemized factors that are bankable, and compliments traditionally thought process exhibited in the development of reading interventions.

# 3. Experimental/Materials and methods

To understand the relationship of household factors on the ability of pupils to learn reading and how such relationships could influence the programming of reading interventions, a reading test was conducted in 17 schools and reached out to 230 pupils in Mangochi District, Malawi. The test targeted 11-12-year-olds, assessing their ability to acquire reading skills for an equivalent of two years. Test items that the students were tested on included: 1) letter naming, 2) letter sounds, 3) Oral reading fluency (ORF), 4) comprehension and 5) extended

comprehension. Further data was collected from the students on the household factors that may have influenced their ability to acquire reading skills apart from enrolling into a homogenous National Reading Programme that is standardized and well-controlled for implementation variations. The factors that pupils provided data on included the following 1) pre-school attendance, 2) meals each pupil took a day, 3) language spoken at home, 4) school attendance, 5) reading partners, 6) reading at home, 7) reading practice, 8) reading homework, 9) nutrition access intensity, 10) other sources of textbooks, 11) supplementary reading materials and 12) places where pupils read. The results from the reading tests were marked for each response item. There was a limited variance between the mean scores on the items in the test. However, the spread of the response variables in the test items was not normally distributed. Therefore, the response items were centered and standardized through the residuals for the mean score (z-mscores) to enable the attachment of predictors to an independent variable whose residuals were standardized for analysis. Therefore, the z-mscores indexed all test items from the reading test to a 0-101 percentage point range so that analysis of variances with each household is tested for influencing variance on how well pupils acquired reading skills. This was done to verify that differences in the reading ability of students are genuinely explained by these household factors and the reason behind the variation is not opportune. Document analysis was done on key recommendations related to household factors made on the Malawi National Reading Programme to assess whether the recommendations meant to add value to the design and implementation of the programme were incorporated.

### 4 Discussion of results

The results are discussed at three levels. 1) Predictors of reading based on the teaching of reading through phonics, 2) The analysis of variance and definition of key variables that significantly explain variation in the reading ability of the pupils assessed and 3) secondary data analysis on decisions made on the Malawi Reading Intervention based on evidence generated from assessments on reading predictors other than the theory-based posits that fundamentally informs the architecture of the reading programme.

### 4.1 Association of pre-reading skills to reading fluency

The study examined the association between pupils' mastery of pre-reading skills and reading fluency. The purpose of the study was to determine whether pupils who had mastered the phonics-based reading instruction were better readers than those who had difficulties learning to read through the phonics-based instruction. The test was conducted through an analysis of variance from the reading scores in the pre-reading sub-tasks in the reading test and their association with oral reading fluency. The hypothesis tested to determine such an association was phrased as below:

H0 = Pre-reading skills do not predict the acquisition of reading skills and the ability to read early in life, and H1 = Pre-reading skills predict the acquisition of reading skills and the ability to read early in life; H0 is the null hypothesis, and H1 is the alternate hypothesis.

The dependent variable in the hypothesis testing described above was the oral reading fluency as measured by the number of correct words read per minute. In contrast, the pre-reading skills scores of the pupils were the observable variables. The pre-reading skills or sub tasks in the reading test included letter knowledge, syllable reading, and familiar word reading. The analysis of variance showed that the statistical Fisher test was highly significant and the regression coefficients of the predictors were not equal to zero, indicating that there is sufficient evidence to reject the null hypothesis and that the study provides a rationale for doing so. This finding validated the alternate hypothesis that pre-reading skills predict the acquisition of reading fluency, hence mastery of phonics-based instruction had a positive effect on the ability of study participants to acquire reading skills. The results of the test are presented in Table 15 below.

Table 1: Phonics reading instruction hypothesis test results.

		Number of Observations	310		R-squared	0.9638		
		Root MSE (Explain)	11.34		Adj-squared	0.9133		
	Source	Partial SS	df	MS	f	Prob>F		

Model	443103.79	180	2461.688	19.09	0***
Familiar Word Read	81801.923	53	1543.432	11.97	0***
Syllable reading	27210.096	65	418.6169	3.25	0***
Letter Knowledge	19454.778	62	313.7867	2.43	0***

The results presented in Table 1 above led to the conclusion that familiar word reading knowledge, syllable reading, and letter knowledge accurately predicts oral reading fluency. Pupils with stronger pre-reading abilities read more words from a given paragraph than pupils with weaker pre-reading abilities. This finding is further supported by the F-Statistic (p=0) and the observed R-squared (0.9638), implying that the findings are reliable and not a false result of peculiarities in the data set. This finding confirms the importance of pre-reading skills in teaching reading through phonics instruction and predicts the fluency of pupils as noted by reading instruction theorists (Graaff et al., 2009; Torgerson et al., 2019 & Woore, 2022).

The aforementioned results confirm that the phonics teaching approach is methodical and effective for pupils with stronger pre-reading skills. Furthermore, the study validated the practices and showed that the delivery of reading instruction to the pupils in the study followed the evidence of reading theory as postulated by other theorists on reading through phonics instruction (Palmer et al., 1985). This finding, therefore, confirms positions advocated by scholars on behavioural reading theories, which assume that reading is learned procedurally. Further, they indicate that learning to read works well with reinforcing and scaffolding routines in the learners by the reading instructors; and that decoding letters, letter blends, and syllable blending leads to early success in the acquisition of reading skills (Freeman, 2004; & Ertmer, 2013).

The pupils who participated in the research were from comparable linguistic, cultural, and geographical backgrounds. Therefore, the pupils had a probable similar schema in these respects. In this case, the cognitive theorists' assumptions that schema aids the acquisition of reading skills (Clark, 2018; Guney & Al, 2012) would have held true and decreased the variance in the reading fluency scores for the pupils under the study. However, this was not the case, as there was marked variation and differentiation in the reading fluency scores. Similar assumptions raised by transactional reading theorists, namely that pupils learn to read through interaction with text and prior experiences (Foster & Rosenblatt, 1998) would have reduced the variance in fluency scores. However, this was also not the case. Therefore, without disputing the usefulness of cognitive and transactional reading theorists, the results indicate that acquiring reading skills at this early stage requires behavioural routines as a basis for learning to read. Once pupils internalise the patterns, they are able to decode words, including nonsense words. Notwithstanding other theories of reading, such as cognitivism and constructivism, which emphasise comprehension, this finding is relevant and useful for comprehension-related reading sub-tasks (Carlson, 1999; Clark, 2018; & Lowenthal & Muth, 2008). Therefore, the behavioural aspect in phonics instruction needs complementing and blending with other reading theories for pupils to master reading and comprehend what they read. This phenomenon is despite the understanding herein that, firstly, phonics require that a pupil can read the word before meaning-making and comprehension processes. This finding explains why those who were able to name the letters, sound the letters, read syllables, and blend syllables into words had an easier time reading words in the paragraphs.

Regardless of the success in reading the words, comprehension remained low on average for fluent students since the test only allowed those who could read the paragraphs to proceed to the reading comprehension test. This finding suggests that the behaviourist phonics reading approach was significantly effective in teaching letter decoding and word reading. However, it is limited in inculcating reading comprehension skills at this level, thus necessitating the application of other advanced reading theories such as constructivism and transactional theories of reading in integrating comprehension skills in the teaching of reading. It further enables the pupils to use prior knowledge, extend the text to non-textbooks and bring more titles to transact with the text in different contexts and make their meanings so that they can apply such strategies in reading comprehension tests. The initial finding supports the earlier position in the literature review that no singular reading theory should dominate a reading approach that informs a reading curriculum (Gourlay, 2003). Instead, strategies and assumptions that are levelled

to the pupils and the independence of teachers and the pupils in instruction and meaning-making should direct applicable theories, not merely targeting fluency as was the case in this study.

In spite of the foregoing, it is evident from the findings of this study that the application of the phonics approach is not the only factor upon which a reading curriculum should be based. Other factors contribute to reading programmes having more sustainable outcomes. For instance, the analysis of variance and further review of the square root of the variance of the residuals (RMSE) was high at 11.4. These results suggest that much as the pre-reading skills explain better oral reading fluency, other factors help pupils learn to read. The pre-reading skills cannot fully explain variation in scores on a test performed in oral reading fluency, thus agreeing with the literature, which shows that other factors such as pupil environment (Afoakwah & Koomson, 2021; Beluska-Turkan, 2019); household factors (Aram, et.al., 2013), and school resource availability (Adamba, 2018; Aas & Brandmo, 2016; Aina 2011; Akech, 2017) have been proven to affect pupils' learning abilities in addition to the reading instruction. These factors earned ground for inclusion in this study to examine further those factors that affect the ability of pupils to learn to read in addition to reading instruction.

## 4.2. Household factor analysis and respective effects on reading skills acquisition

The analysis of variance (ANOVA) for *z-msore* as a response variable to independent predictors mentioned above and available in Table 2, shows that the model is significant (p = 0, and ). The root MSE (RMSE) is large (0.894951), rightly so, as several factors contribute to the ability of pupils to learn reading, such as pupil and school factors that are not included in this analysis of variance since the primary focus is to nail down factors within the household that explain variation in pupil's abilities to learn reading.

Table 2: ANOVA output on household effect pupil ability to learn reading.

Number of observations = 293			R-squared = $0.2902$			
Root MSE = $0.894951$			Adj R- squared	Adj R- squared = $0.1872$		
Source	Partial SS	df	MS	F	Prob>F	
Model	83.505047	37	2.22568932	2.82	0.000000	
Nursery attendance	1.0669522	2	0.53347609	0.67	0.5146	
Meals taken per day	6.1171066	4	1.5292766	1.91	0.1093	
language spoken at home	1.760985	2	0.88049249	1.1	0.3347	
School attendance	10.753957	5	2.1507915	2.69	0.0219	
Reading partners	7.0525126	5	1.4105025	1.76	0.1213	
Reading at home	4.8678304	5	0.97356608	1.22	0.3022	
Reading practice	6.1752254	1	6.1752254	7.71	0.0059	
Reading homework	0.1318358	1	0.13183584	0.16	0.6853	
Nutrition intensity	5.0982016	3	1.6994005	2.12	0.0979	
Other sources of textbooks	3.4335552	3	1.1445184	1.43	0.2348	
Supplementary reading materials	7.5312004	3	2.5104001	3.13	0.0261	
Reading places	1.1140395	3	0.37134648	0.46	0.7079	
Residual	204.23881	225	0.80093652			
Total	287.74386	292	0.98542418			

The following factors were found statistically significant at 95% confidence interval and explained the variance in the respondent variable: 1) supplementary reading materials (F-statistic = 3.13, p = 0.0261), 2) nutrition intensity was marginally significant (F-statistic = 2.12 and p = 0.079), 3) reading practice was very significant factor on ability of students to learn reading (F-statistic = 7.71, p = 0.0059), 4) times a student attends school was also very significant (F-statistic = 2.69, p = 0.0129), and 5) who the pupil read to at home was marginally significant (F-statistic = 2.69, p = 0.0129), and 5)

statistic = 1.76, p = 0.12), similarly, for the meals a pupil take in a day (*F-statistic* = 1.91, p = 0.1093). This implies that they influence the performance of pupils in the acquisition of reading skills. Therefore, required integration in the reading intervention development and increased level of effort and investment during implementation.

From the assessment, language spoken at home, who the children practiced reading with, whether schools provide reading homework or not, other sources of textbooks, places where a pupil practices reading, and whether one attended nursery or not were found not to predict the performance of students assessed in their acquisition of reading skills. This was largely due to homogeneity in responses than theoretical underpinnings behind these factors, therefore subject to further analysis, perhaps through qualitative inquiry into how these factors may have affected the variation in the ability of pupils assessed to learn reading or level of recorded reading ability.

4.3. Document review on programming decisions made on the Malawi reading intervention based on evidence from household predicting factors

Notably, due to the findings above and from similar studies (Koch, Bobronnikov, Price, Hausdorffk & Prenovitz, 2019), recommendations to focus on the household factors in reading intervention programming have been put forward to change development designs of reading programmes. However, the reading intervention has remained focused on teaching instruction based on the enhanced phonics approach. The investments have followed a similar trend for Malawi and other countries in Africa, such as Ethiopia and Liberia indicating consistent belief in the programming theory aside from evidence that the reading interventions cannot achieve as great on their own, thus require complementary investments in predictors that contribute to the acquisition of reading skills for pupils.

### 5. Conclusion

It is apparent that the theoretical underpinning of reading interventions in the case of Malawi is solid and follows standardized protocols informing teaching of reading in most countries that are implementing a phonics-based reading approach. However, the investments and level of effort on the reading interventions are not flexible to include other predictors of reading as noted from household assessments conducted herein and previous assessments. While household factors influence reading outcomes for pupils, failure to include investments in these factors in the design and implementation of the reading interventions prevents the sustenance of reading gains and reduces the margin of improvements in the acquisition of reading skills. This study does not place the onus on investments in the complimentary factors within the reading programmes, however calls for the education developers to undertake a systemic investment analysis that allows for simultaneous investments in the household predictors to complement gains achievable for pupils subjected to reading interventions.

### References

- Aas, M., & Brandmo, C. (2016). Revisiting instructional and transformational leadership: The contemporary Norwegian context of school leadership. *Journal of Educational Administration*, 54, p 92-110.
- Adamba, C. (2018). Effect of school electrification on learning outcomes: a subnational level analysis of students' pass rate in English and Mathematics in Ghana. *Educ Res Policy Prac* 17(1), 15-31.
- Afoakwah, C., & Koomson, I. (2021). How does school travel time impact children's learning outcomes in a developing country. *Rev Econ Household* 1, 1077-1097.
- Aina, A.J., Okusaga, T.O., Adebowale, T., & Ogupinde, T.C. (2011). The role of library in promoting reading habits among Nigerians. *Journal of Research in Education and Society*, e-journal, 168-179.
- Akech, P. (2017). The impact of over-crowded classrooms to teachers and students: Interaction in the process of teaching and learning in selected primary schools in Arusha City Council, Tanzania. Arusha: Grin Verlag.
- Anderson, R.C., Wilson, P.T., & Fielding, L.G.,. (1986). *GROWTH IN READING AND HOW CHILDRENSPEND THEIR TIME OUTSIDE OF SCHOOL*. Illinois: University of Illinois at Urbana-ChampaignSeptember.
- Aram, D., Korat, O., & Hassunah-Arafat, S. (2013). The contribution of early home literacy activities to first grade reading and writing achievements in Arabic. *Reading and Writing*, 26(9), 1517-1536.

- Beluska-Turkan, K., Korczak, R., Hartell, B., Moskal, K., Maukonen, J., Alexander, D.E., Salem, N., Harkness, L., Ayad, W., Szaro, J., Zhang, K., & Siriwardhana, N. (2019). Nutritional gaps and supplementation in the first 1000 days. *Nutrients*, 11(12):2891.
- Carlson, H. L. (1999). From practice to theory: a social constructivist approach to teacher education. *Teachers and Teaching*, 5 (2), 203-218.
- Chiapetta, M. (2013). IMpact Evaluation of the Early Grade Reading Baseline. Washington D.C.: USAID.
- Clark, K. (2018). Learning theories: cognitivism. RadTech, 90(2), 176-179.
- De Stefano, J., Slade, T., & Korda, M., (2013). *Midterm Assessment of the Impact of Early Grade Reading and Math Interventions*. North Carolina.: RTI International.
- Denton, Anthony, Parker, and Hasbrouck. (2004). Effects of Two Tutoring Programs on the English Reading Development of Spanish-English Bilingual Students. *The Elementary School Journal*, v104:4, 289-305.
- Dickinson & McCabe. (2002). Bringing It All Together: The Multiple Origins, Skills, and Environmental Supports of Early Literacy. *Learning Disabilities Research and Practice*, 186-202.
- Elsje van Bergen Titia van Zuijen Dorothy Bishop Peter F. de Jong. (2016). Why Are Home Literacy Environment and Children's Reading Skills Associated? What Parental Skills Reveal. doi: https://doi.org/10.1002/rrq.160
- Ertmer, P. A. (2013). Behaviorism, cognitivism, constructivism: Comparing critical features from an instructional design perspective. *Performance Improvement Quarterly*, 26(2), 43-71.
- Forster, E. M., & Rosenblatt, R. (1998). Reflective Texts, Reflective Writers. In: *Reflection In The Writing Classroom*, Kathleen Blake Yancey, University Press of Colorado; Utah State University Press.
- Freeman, D. F. (2004). Essential linguistics: What you need to know to teach reading, ESL, spelling, phonics, and grammar. Portsmouth, NH: Heinemann.
- Gentaz, E., Sprenger, L & Theure A.,. (2015). Differences in the Predictors of Reading Comprehension in First Graders from Low Socio-Economic Status Families with Either Good or Poor Decoding Skills. .*PLOS ONE | DOI:10.1371/journal.pone.0119581*.
- Gourlay, S. (2003). *The SECI model of knowledge creation: some empirical shortcomings*. Kingston Bussiness School, Kingston upon Thames KT2 7LB UK.
- Graaff, S., Bosman, A. M., Hasselman, F., & Verhoeven, L. (2009). Benefits of systematic phonics instruction. *Scientific studies of reading*, 13(4), 318-333.
- Guney, A., & Al, S. (2012). Effective learning environments in relation to different learning theories. *Procedia-Social and Behavioral Sciences*, 46, 2334-2338.
- Harrington & Sawyer. (1992). L2 Working Memory Capacity and L2 Reading Skill., , 25-38. doi: Studies in Second Language Acquisition 14(1), 25-38. doi:10.1017/S0272263100010457
- Howard, L. (2010). Does food insecurity at home affect non-cognitive performance at school? A longitudinal analysis of elementary student classroom behavior. *Economics of Education Review, Volume 30, Issue 1*, 157-176.
- Kachiwanda, O. (2010). Gender disparity in the acquisition of literacy in sub-Saharan Africa: the case of Malawi. *Journal of Humanities*, 24-43.
- Kaluge, Kustiani & Indawati. (2019). The Effect of Parental Status and Domestic Possessions on Reading Literacy of Indonesian Student. doi:https://doi.org/10.2991/aes-18.2019.68
- Koch, Bobronnikov, Price, Hausdorffk & Prenovitz. (2019). *National Reading Assessment*. Lilongwe: Abt. Associates.
- Langer, A. (2010). Language of Instruction and Cognitive Development: Case-studies from Malawi. University of Leipzig.
- Lowenthal, P., & Muth, R. (2008). Constructivism. *Encyclopedia of the social and cultural foundations of education*, 46, 177-179.
- Malawi Government. (2016). National Reading Strategy. Lilongwe: Ministry of Education.
- Mastropieli, Leinart and Scruggs. (1999). Strategies to Increase Reading Fluency. *Intervention in School and Clinic*, 34(5), 278-283. doi:10.1177/105345129903400504
- Ministry of Education, S. a. (2016). Circular on the extension of School Day in Malawi. Lilongwe.
- Nagarajan, Gonzalez & Hur. (2017). *Malawi National Reading Programme: Baseline Assessment*. Washington, DC.: USAID.
- Palmer, J., MacLeod, C. M., Hunt, E., & Davidson, J. E. (1985). Information processing correlates of reading. *Journal of memory and language*, 24(1), 59-88.
- Pang, Muaka, Bernhardt and Kamil. (2010). Teaching Reading. Paris: International Academy for Education.
- Piper, B. (2010). Ethiopia Early Grade Reading Assessment. North Carolina: RTI International, ED Data II.
- Piper, B. (2010). *Ethiopia Early GradeReading Assessment: Data Analytic Report: Language and Early Learning*. North Carolina: RTI International.
- Richards, J.C and Willy A. Renandya. (2002). Methodology in language teaching: An anthology of current practices. Retrieved August 29, 2018, from http://www.cambridge.org/9780521808293
- Roberts, C. (1994). . The Journal of Educational Issues of Language Minority Students, v13 p. 209-221.

- Roundy and Roundy. (2009). The Effect of Repeated Reading on Student Fluency: Does Practice Always Make Perfect? *World Academy of Science, Engineering and Technology, v 33*, 1103-1108.
- Slade, T., Piper, B., Kaunda, Z., King, S., Hibatalla, I. (2017). Is 'summer' reading loss universal? Using ongoing literacy assessment in Malawi to estimate the loss fromgrade-transition breaks. *Research in Comparative & International Education*, Vol. 12(4), 461-485. Retrieved from journals.sagepub.com/home/rci
- Torgerson, C., Brooks, G., Gascoine, L & Higgins, S. (2019). Phonics: reading policy and the evidence of effectiveness from a systematic 'tertiary' review, *Research Papers in Education*, 34:2, 208-238.
- UNESCO. (2017). More Than One-Half of Childrenand Adolescents Are Not Learning Worldwide. *UNESCO Institute of Statistics*, 1-25.
- USAID. (2012).
- USAID. (2016). Malawi National Reading Assessment. Washington, D.C.: USAID.
- Zambrana, K. A., Hart, K. C., Maharaj, A., Cheatham-Johnson, R. J., & Waguespack, A. ((2019)). Latino parent involvement and associations with home literacy and oral reading fluency. *School Psychology*, *34*(4), 398–409. doi:https://doi.org/10.1037/spq0000298
- Woore, R. (2022) What can second language acquisition research tell us about the phonics 'pillar'? The Language Learning Journal, 50(2), 172-185