Journal of Education and Human Development September 2014, Vol. 3, No. 3, pp. 101-109 ISSN: 2334-296X (Print), 2334-2978 (Online) Copyright © The Author(s). 2014. All Rights Reserved. Published by American Research Institute for Policy Development DOI: 10.15640/jehd.v3n3a8 URL: http://dx.doi.org/10.15640/jehd.v3n3a8

The First Language (L1) or Mother Tongue Model Vs. The Second Language (L2) Model of Literacy Instruction

Daria Mizza¹

Abstract

In several developing countries with linguistic minorities where the colonial language is preferred for educational purposes, curriculum content is often presented in a language unfamiliar to a significant portion of children beginning school. When the language used for instruction is not understood, pupils do not have the opportunity to learn, and therefore neither ableto understand the content nor to interact with it by participating in class. Researchers raise concerns that those children who do not acquire adequately the language used for instruction will facedifficulties in becoming fully literate (McLaughlin, 1984; Collier & Thomas, 1989; Collier, 1992, 1995; Collier & Thomas, 1995). In order to avoid this situation, children should learn the language used for instruction before learning basic literacy skills in it. Otherwise, pedagogical practices should be conducted in the mother tongue to support the initial stages of their literacy development. Bringing language theories and research findings in literacy development together, this paper advocates for a mother tongue-oriented approach to classroom practices related to literacy acquisition and claims that adequate pedagogical support in the pupil's first language (L1) is crucial during the early acquisition process of literacy skills.

Keywords: Literacy skills, language instruction / acquisition, linguistic minorities

Key Terminology

In this paper, we will frequently refer to the *mother tongue* with the term *first language* (L1), indicating the child's native or first acquired language. We will also refer to the *second language* as L2: this is the language other than one's mothertongue being learned or studied in its environment, for example the country or the region where the language is mainly spoken. In the examples and case-studies presented in this paper, the second language is used for the purpose of instruction.

Finally, FL refers to the *foreign language*learned or studied outside its environment.

This terminological distinction is important because there are key differences – with consequential major teaching implications - between L1 and L2 or FL learning.²

Education systems inattentive to mother tongue languages different from the second language (L2) used for instruction have not provided opportunities for acquisition of the L2 before literacy development, nor have given necessary support in learning literacy basic skills in the child's mother tongue. Interdisciplinary studies concerning language planning and policy in Sub-Saharan Africa (Bokamba, 1991; Kamwangamalu, 1997;

¹School of Advanced International Studies – Johns Hopkins University, Language Studies Program – SAIS Rome Building, 1619 Massachusetts Avenue NW – Washington DC 20036.

Email: dmizza1@jhu.edu, Phone: 202-663-5787, Fax: 202-663-5764

²It is important to note that the distinction between L2 and FL is not universally recognized, especially in the US. (Crystal, 2008)

Harris, 2012)suggesthat these systems have been failing to educate children effectively, denied them access to a quality education and to working life, and ultimately wasted precious time as well as countless energy. Children from ethno-linguistic communities with access to education do not speak nor understand the official language used for instructionby the time they begin primary school. Being communicatively competent only in their mother tongue – not used in the classroom as a foundation for developing literacy skills – the official language represents a L2 to be learned while acquiring the literacy foundation.

Learning about literacy, however, is a continuous process that begins in the very early years, even prior to primary school. Both reading and writing are established most readily on a foundation of good spoken language, therefore linked to the early oral languageand social interaction (O'Connor, Notari-Syverson, &Vadasy, 2005). Significant lines of evidence from current research suggest that children's literacy development begins long before children start formal instruction in primary school (Holdaway, 1979; Teale&Sulzby, 1986; Clay, 1991; Allington& Cunningham, 1996; Burns, Griffin, & Snow, 1999; Hall & Moats, 1999), especially when nourished by social interactions with caring adults. Therefore, children from ethno-linguistic communities start their primary school facing a disadvantaged linguistic situation, which may undermine their later literacy development with lasting - and often permanent - consequences.

If compared to those children communicatively competent in the official language used for instruction, children from ethno-linguistic communities lack the linguistic skills necessary for the acquisition of the foundation in literacy, regarded as the most critical academic task in primary school (O'Connor, Notari-Syverson, &Vadasy, 2005). For these disadvantaged children, learning the new language used for instruction while acquiring basic literacy, has so far proved ineffective, as learning a L2 is "a cognitively challenging and time-consuming activity" (Tabors, 1997, p. 81) and simply being exposed to the L2 input does not guarantee that acquisition is taking place.

Linguistic theories on Second Language Acquisition (SLA)³will help delve into the linguistic reasons of this educational problem. According to Krashen's Input Hypothesis (1985), L2 is acquired processing comprehensible input that is, input that has been listened to and understood. If not understood because way beyond the level of the student, that input proves useless. For acquisition to take place, the input has to be superior to the level of the learner (i+1), but also comprehensible.

Beside the importance of a superior and comprehensible input, the L2 acquisition and learning may also occur through the production of language, allowing L2 learners to identify gaps in their linguistic knowledge and subsequently attend to relevant output.⁴

Providing L2 learners - in our specific case pupils from ethno-linguistic communities - with superior but comprehensible input, as well as offering them adequate opportunities for output, that is to make pupils understand, speak, read, and write the new language used for instruction in early school years would be extremely time consuming. This process would waste valuable time-on-task⁵ and eventually leave pupils at a significant disadvantage, compared to pupils whose L1 happens to be the same as the L2 used in their schools for instruction.

In addition, the cognitive⁶ difficulties children may experience as they acquire a L2 would require pupils a significant amount of effort. Research on brain science with implication for teaching first, second, and foreign language has contributed to the understanding of the complexity of the L2 learning process.

³The term Second Language Acquisition (SLA) refers to the process through which one or more second or foreign languages are acquired.

⁴The Output Hypothesis as proposed by Merrill Swain seeks to rectify the assumed inadequacies of the Input Hypothesis proposed by Krashen, focusing solely on the necessity of a comprehensible input. By addressing the importance of the language production for L2 acquisition, the Output Hypothesis hypothesizes a loop between input and output, by positing that both input and output are necessary for language acquisition and learning. (Swain, 1993, pp. 158-164; Swain & Lapkin, 1995; Ellis, 1993).

⁵Time on-task - also known as engaged time - is the amount of time actually spent learning (Slavin, 2003).

⁶Since reading and writing are thinking processes (Allington& Cunningham, 1996; McGee &Richgels, 1996), emergent literacy must be also considered in the context of children's developing cognitive skills.

Recent studies on brain science suggest that delaying exposure to a language 1)leads the brain to use a different strategy, with bilateral activation rather than unilateral, when processing grammar⁷ and 2)requires social interaction with other target language speakers for detecting the different phonemes, thus learning the different sounds⁸. This has clear implications for children who need to learn the official language used for instruction, as a bilateral brain activation may cause a harder, slower, and sometimes inefficient way of learning, with the risk of a poor performance on grammar tasks. In addition, social interaction with native speakers may be difficult to take place, with negative consequences for their phonemic awareness, crucial to identify individual speech sound in spoken words.

By acknowledging the crucialrole of social interaction, also the interaction theorists (Long, 1985; Pica, 1994; Lightbrown&Spada, 1999)⁹ have contributed to theunderstanding the complex dynamics involved in learning a L2. This process requires a sequence - time -, a structure - order or path of learning- and a final state.

The learner must overcome four problems, which appear and have to be solved also at the same time with his knowledge of the world, the situation, and the contextual information: 1) Analysis, the learner must segment acoustic signals and compare them with the information he has from the context; 2)Synthesis, the sounds and words understood have to be joined to understand and produce enunciates in the L2; 3)Embedding, those enunciates have to be identified in the situational and linguistic context; 4)Matching, the learner compares his linguistic variety with the target language.¹⁰

Conversational interaction may facilitate this elaborated process, by increasinginputcomprehensibility (Long and Robinson, 1998) under certain conditions. For example, when learners are required to engage in meaningful activities and are obliged to "negotiate for meaning" (Lightbrown & Spada, 1999, p.122), using a variety of conversational modifications - such as repetition, clarification, and confirmation checks - to gain understanding (Pica, 1994).

In sum, the exchanges of comprehensible input and output have an enhancing effect, as long as pedagogical practices for L2 learning are designed to provide not only interaction, but also opportunities for pupils to negotiate meaning and use support structures.

Based on this theoretical premise, a significant amount of time and effort would be required for children from ethno-linguistic communities to learn the language used for instruction.

Besidestheabove mentioned SLA theories and teaching implications from research on brain science shedding light on the complexity of the L2 learning process, a significant body of academic research in the fields of cognition (Gee, 2004; Heath, 1983; Watson, 2001) and literacy development (Vygotsky, 1962, 1978; Teale, 1984;Roth, Speece, Cooper, & De La Paz, 1996; Dickinson, McCabe, & Essex, 2006) has contributed to a clearer understanding of the process involved in becoming literate. The view of these studies considers literacy not only as a linguistic activity, but also as a complex sociological and psychological one.

Starting from the mid-1980s, researchers and educators revised their view about literacy learning (O'Connoret al., 2005) considering it as an integral part of everyday living (Teale, 1984). Based on this view, the interactive relationship between language and cognitive growth is very important, so a stimulating and rich linguistic environment in the L1is considered as crucial for language development.

⁷Research with electroencephalogram (EEG) conducted by Helen Neville has shown that grammatical processing activates the left hemisphere only. After the sensitive period for learning grammar – between one and three years of age – however, similar regions in the left and right hemisphere are activated, leading the brain to an unusual and harder learning process. (Blakemore &Frith, 2012, pp. 44, 45)

⁸A recent study by Patricia Kuhl shows that sound learning for infants later than nine months – identified as the sensitive period - occurs only if the new sound comes from a real person – not a recorded sound – interacting with the child. (Blakemore &Frith, 2012, p. 40)

⁹By stressing the importance of the two-way communication, the interactionists (Long, 1985; Pica, 1994; Swain, 1993, 1995) take a step forward from Krashen(1985), who believes that only one-way comprehensible input is required for SLA.

¹⁰Gallaway, C.,& Richard, B.J. (1994) Input and interaction in language acquisition. Cambridge, UK: University Press.

Therefore, both engaging and encouraging children to express themselves interactively is an effective way to build language experience (McLaughlin, 1984; Cuevas, 1996), and strengthening the L1 while acquiring the basic literacy in it supports the continuity of cognitive growth.¹¹

Such a conclusionreflects the social-interactionist perspective¹² (Vygotsky, 1978) which emphasizes the role of scaffold interaction with adults in the pupil's literacy learning process. The classroom practice of scaffolding¹³ (Tharp &Gallimore, 1988), in which teachers guide and support the child's learning by building on what the child is able to do, is not applicable to pupils with no knowledge of the language used for instruction, because they are not functioning at the same developmental level as the pupils who are proficient in the language.

L1 development seems the key for accessing literacy and by highlighting how language and literacy learning are situated, research hasconfirmed that a high level of literacy and language developmentmay take many years and require constant training.¹⁴

If literacy education is given special attention and pedagogical support in the mother tongue is provided when the L1 is not the language of instruction, competences in reading and writing may rise considerably. A successful example is the language policy promoted by the Zambian Primary Reading Program (PRP), initiated by the Zambian Ministry of Education in 2000. Pupils were encouraged to read and write initially in their local familiar languages; which successively helped them transferthe reading skills to the English language. This approach proved effective for learning literacy, as the reading and writing levels of children in the first year of primary schools recorded an improvement of 780 percent, allowing them to perform effectively in all subjects across the curriculum. ¹⁵

A significant body of research conducted internationally(Bradley & Bryant, 1983; Share, Jorm, Maclean, & Matthews, 1984; Perfetti, Beck, Bell, & Hughes, 1987; Torgesen, Wagner, &Rashotte, 1994; Juel, 1998) endorses this practice and suggests that it is possible to intervene with pedagogical support in the mother tongue. The Scandinavian countries provide an excellent example of education systems having implemented intervention programs with scaffolding approaches used successfully to teach literacy skills in the child's mother tongue. Among them, Sweden has identified literacy as key to both integration and working life. Pupils of languages other than Swedish receive studyguidance in their stronger language until they are ready to learn other subjects in Swedish.¹⁶

¹¹When children, teachers, and parents use their L1 - in most of the cases the language they know best - cognitive development is not interrupted. On the contrary, when children are required to learn all new information and skills in the L2, their L1 cannot keep pace with the new knowledge. Supporting only the L2 may 1) lead to a "Limited Bilingualism", where children lose their L1 becoming "Subtractive Bilinguals", and 2) give them the impression that a different language or culture is not valued, which eventually prevents them from becoming proficient in either their L1 or L2. (Ramsey, 1987; Saville-Troike, 1982; Collier, 1992)

¹²Vygotsky's theories are relevant to the discussion of emergent literacy and help explain the cognitive concepts formed by young learners. Emergent literacy is based on behaviors modeled and supported by adults encouraging children to change and refine their own ideas to more closely match conventional notions. (Vygotsky, 1978)

¹³Wood, Bruner, and Ross (1976) introduced scaffolding as a metaphor to describe a process observed in interactions taking place between parents and children. During the process of scaffolding, the adult guides and supports the child's learning by building on child competence and individual characteristics. Later on, the notion was applied to classroom practice (Tharp &Gallimore, 1988) and language intervention (Norris & Hoffman, 1990).

¹⁴Ouane, A.,&Glanz, C. (2005) Mother tongue literacy in Sub-Saharan Africa

^{(2006/}ED/EFA/MRT/PI/75). Paris, France: UNESCO Institute for Education.Retrieved April 26, 2013 from

http://unesdoc.unesco.org/images/0014/001460/146090e.pdf

¹⁵Tambulukani, G., Sampa, F., Musuku, R., & Linehan, S. (1999). Reading in Zambia: A quiet revolution through the primary reading programme. In S. Manaka (Ed.), Proceedings of the 1st Pan-AfricanConference on Reading for All (pp. 170–175). Pretoria, South Africa: International Reading Association, READ& UNESCO/DANIDA.

¹⁶AfGeijerstam, A^a. (December 2012) Curriculum studies of mother tongue education in Sweden. Education Inquiry, 3(4), 471–475.

Keeping in mind the approach followed by the Scandinavian countries - and specifically the Swedish example¹⁷ -a mother tongue based instructional modelcould beapplied in developing countries with linguistic minorities, with basic literacy education facilitated successfully in the children stronger language.

Such a model focuses on the importance of languageand literacy development during primary school years and may be based on the necessity of a language understood by all pupilsentering the education system.

In the next section, we will attempt to bring together language theories and research findings in literacy development, in order to advocate for a mother tongue-oriented approach to classroom practices associated with literacy acquisition and early development. Research highlights will be supported by two specific case-studies. From the analysis of each case will emerge that: 1)the L2 model – still persisting with enthusiastic support from national educational policy makers and much of the international community – is not effective and 2)a mother tongue-based literacy education may be beneficial to children from ethno-linguistic communities.

As we will see, a consistent body of literature documents the failing results of educational programs in developing countries, in which the L2 model has been applied and the importance of the L1 as a variable shaping educational outcomes has been largely ignored.

So far, the educational outcomes of literacy programs advocating the use of one single "official" language in multilingual environments have been very disappointing, as the desired expectations have not been met, despite the high cost for implementation. The conditions for pedagogical success of an L2 learning model where a single "official" language of instruction is used are that the language of the classroom is either well known or quickly learned by students, but it barely happens that either of these twoconditions is fulfilled.

Two scenarios of low-level literacy will be presented in the next paragraphs for further analysis: 1) a case-study conducted in the north-western area of Cameroon and 2) a research investigation conducted in the US educational system.

1.1 The North-western Cameroon Case-study

In the north-western area of Cameroon, Kom is the primary language spoken, but English is the language of instruction in local schools. The fact that the L2 is the foreign medium of instruction poses common problems of comprehension and expression.

Oral and written communicative exchange is reduced to "safe talk" 18- a term referring to classroom interaction practices such as rote learning or repetition - at the detriment of active, deeper learning that cannot take place in the classroom. Negative consequences of it influence not only pupils lacking the language competence to understand what the teacher says, but also teachers who often face language difficulties themselves, as only have passable proficiency in the designated language of instruction. In this scenario of low-level literacy, children can succeed in the classroom only to the extent that they quickly master the L2 used for instruction and can follow the teacher directions.

A deeper exploration of the case-study - with insights on the interaction between linguistic complexity, diversity, and educational outcomes - will help better understand the reasons of this failure.

In 2007, an experimental research¹⁹ was carried out by Stephen L. Walter, literacy and education consultant for SIL International²⁰. The research was set up with an experimental project of twelve (12) experimental schools in which the mother tongue was the language of instruction and twelve (12) matched control

¹⁷Schleppegrell, M.J. (2004) The Language of schooling: A functional linguistics perspective. Mahwah, NJ: Lawrence Erlbaum.

¹⁸Chick, J. K. (1996).Safe-talk collusion in apartheid education. In H. Coleman (Ed.), *Society and the language classroom* (pp. 21-39). Cambridge, UK: Cambridge University Press.

¹⁹Walter, S.L. (2007). *Mother tongue-based education in developing countries:Some emerging insights* (GIAL/SIL). Retrieved April 26, 2013 from http://www.globalpartnership.org/media/library/blog/Steve-Walter-Mother- TongueInsights.pdf

²⁰SIL International (<u>www.sil.org</u>) is a faith-based nonprofit organization committed to serving language communities worldwide by helping them build capacity for sustainable language development.

schools in which English (L2) was the language of instruction. In the experimental schools, children were taught English as a subject for approximately three(3) hours a week, while in the control schools children were exposed to twenty-two hours and thirty minutes (22.5) of English a week of assigned instructional time, as all instruction was delivered in English.

Children in both programs took the same final proficiency assessment in oral English. Assessments gathered during the last five (5) years of the program indicate that students in the Kom mother tongue program scored better in almost every measure of student progress. In contrast, students in the study's twelve English-medium comparison schools were struggling to learn to read. The results of this experimental research will be even more significant if we re-construct the learning process followed by the two groups of pupils: while students in the Kommother tongue were learning to read, and at the same time becoming proficient in their L1; students in the L2 used for instruction – English - were carrying on two different and unrelated tasks: learning aL2 and the skill development of reading it.

The reading skill development in a L2 is only possible after appropriate scaffolding takes place to ensure that children have sufficient knowledge and academic vocabulary. A transition from learning in the L1 to learning (and being assessed) in the L2 is indeed possible, but in order to be effective should take place gradually. Basic skill (e.g. reading and writing) instruction in the L2 needs to be systematic and explicit.²¹

Since this process can take several years of schooling, the most positive and constructive policy recommendation stemming from this example is that curricula, materials, and instruction must support children learning in the L1, at least during the initial stages of literacy acquisition.

This view, however, may be objected on the ground that competency in a L2 and/or foreign language (FL) is an excellent mean to find a good, future occupation. Many parents, for example, may be concerned that the early literacy development in the L1 hinders their children's opportunity to learn a foreign language, which is often the key goal of sending them to school.

1.2 The Investigation conducted in the US Educational System by Thomas & Collier

Thomas and Collier (1997) originally started their research around this preoccupation. The investigation was conducted in the US educational system and contrary to conventional wisdom, its empirical findings indicated that children receiving as much as six (6) years of instructional support in their mother tongue not only finished their formal education at a higher level than those submerged in English only programs, but they also achieved a greater level of proficiency in English.

While the research of Thomas and Collier was based entirely upon data drawn from US schools, the same hold true in developing countries where teachers were less sophisticated and technical support was much more limited, as demonstrated by the research conducted by Walter in Cameroon. Both local parents and educators were surprised to know that the children in their L1-based classrooms, using Kom as language of instruction, outperformed their peers in their L2-based classrooms, using English as language of instruction, where they were exposed to listening to English for more than twenty (20) weekly hours.

We can therefore conclude that the instructional arrangement of the Cameroon mother tongue educational program had not hindered the children's English ability. In fact, such a model of instruction had proven beneficial for some teachers, who were able to focus on high-quality instruction of concepts in a familiar language without the obligation of becoming proficient at teaching in the L2.

²¹Important language teaching implications based on Krashen's (1987, 1988) SLA hypotheses suggestthat language development does not only take place through acquisition, a subconscious and natural process, part of the overall development of the physical, social, and cognitive child development. Although criticized as partially questionable, Krashen'shypothesis about second language acquisition and learning contribute to delve into this linguistic issue: by the time they reach school-age, children naturally obtain a communicative competence in their mother tongue, but this does not hold true for a L2 they learn at a later stage, upon entrance to primary school. The communicative competence in the L2 is reached through learning, mainly a conscious process consisting of reflection and systematization of language structures and rules. (Krashen, 1987, 1988).

Finally, if one of the country's education goal is that children become proficient also in anofficial L2 or in a FL by the end of basic education, this language does not necessarily need to be the medium of instruction. Several countries (Cameroon, India, Mali, the Philippines, South Africa, Vietnam)²² found an optimal condition inencouraging children become proficient in their L1, while offering high-quality instruction in a L2 or FL taught as a subject.

In this way, pupils may become fluent in the L2 or FLduring the critical stage of their cognitive developmentby focusing on the complexity of the learning process itself; while avoiding the burden of learning literacy in a language they do not master yet, which may be extremely detrimental for their later literacy development.

Conclusion

Evidence from research and practice highlighted in this paper confirms that when the mother tongue continues to be supported during the initial stages of literacy acquisition, introducing a L2 - the official language of instruction -does not hinder the full cognitive growth in the L1 nor in the L2.

In fact, as we have seen in the examples from the Primary Reading Program in Zambiaand the mother tongue intervention programs in Sweden, as well as the findings from the research conducted in the US schools, it is possible to implement intervention programs to guarantee children's literacy growth through interaction and classroom practices in the mother tongue.

Such a model of literacy instruction would offer a pedagogically grounded and positive learning atmosphere, where learners and teachers would feel more comfortable with the overall language use. Further studies - particularly from brain research²³ - would be crucial in endorsing this view:a positive atmosphere is a prerequisite for learning, and success in learning enhances self-esteem and motivation to attend school, which in turn would lead to motivation to be a responsible and productive citizen in the country.

Reference List

AfGeijerstam, A. (2012, December). Curriculum studies of mother tongue education in Sweden. Education Inquiry, 3(4), 471-475.

Allington, R.L., & Cunningham, P. (1996). Schools that work. New York, NY: Harper Collins College Publishers.

Bamgbose, A. (2000). Language and exclusion: The consequences of language policies in Africa. Münster, Hamburg & London: Lit Verlag.

Blakemore, S.J., &Frith, U. (2012) The learning brain. UK: Backwell Publishing.

Bokamba, E.G. (1991). French colonial language policies in Africa and their legacies. In D.F. Marshall (Ed.), Focus on language planning: Essays in honor of Joshua A. Fishman (Vol. 3, pp. 175-).

Bradley, L., & Bryant, P.E. (1983). Categorizing sounds and learning to read: A causal connection. Nature, 301, 419-421.

Burns, M.S, Griffin, P., & Snow, C.E. (Eds.). (1999). Starting out right: A guide to promoting children's reading success. Washington, DC: National Academy Press. Retrieved May 2, 2013 from http://www.nap.edu/html/sor/

Chick, J.K. (1996). Safe-talk collusion in apartheid education. In H. Coleman (Ed.), Society and the language classroom (pp. 21-39). Cambridge, UK: Cambridge University Press.

Clay, M. (1991). Becoming literate: The construction of inner control. Portsmouth, NH: Heinemann.

Collier, V.P. (1992). A synthesis of studies examining long-term language minority student data on academic achievement.Bilingual Research Journal, 16(1-2), 187-212.

Collier, V.P. (1995). Promoting academic success for ESL students. Jersey City, NJ: New Jersey Teachers of English to Speakers of Other Languages-Bilingual Educators.

Collier, V.P., & Thomas, W. (1989). How quickly can immigrants become proficient in school English? Journal of Educational Issues of Language Minority Students, 5, 26-38.

²²Pflepsen, A. (2011). *Improving learning outcomes through mother tongue-based education*. Retrieved from RTI International, May 10, 2013 from https://www.rti.org/brochures/eddata_ii_mother_tongue_instruction.pdf

²³Collins, A., J. S. Brown, and A. Holum. (1991). Cognitive apprenticeship: Making thinking visible. *American Educator12*(6), 38-47. Retrieved April 26, 2013 from http://www.21learn.org/arch/articles/brown_seely.html.

- Collier, V.P., & Thomas, W. (1995). Language minority student achievement and program effectiveness. Research summary on ongoing study. Fairfax, VA: George Mason University.
- Collins, A., Brown, J.S., &Holum, A. (1991). Cognitive apprenticeship: Making thinking visible. American Educator,12(6), 38-47.
- Cummins, J. (1981). The role of primary language development in promoting educational success for language minority students. In California State Department of Education (Ed.), Schooling and language minority students: A theoretical framework (pp. 3-49). Los Angeles, CA: National Dissemination and Assessment Center.
- Crystal, D. (2008). A dictionary of linguistics and phonetics. Singapore: Blackwell Publishing.
- Cuevas, J. (1996). Educating limited-English proficient students: A review of the research on school programs and classroom practices. San Francisco, CA: WestEd.
- Dickinson, D.K., McCabe, A., & Essex, M.J. (2006). A window of opportunity we must open to all: The case for preschool with high-quality support for language and literacy. In D.K. Dickinson & S.B. Neuman (Eds.), Handbook of early literacy research (Vol. 2, pp. 11-28). New York, NY: The Guilford Press.
- Ellis, R. (1993). The structural syllabus and Second Language Acquisition. TESOL Quarterly, 27(1), 91-113.
- Gallaway, C., & Richard, B.J. (1994). Input and interaction in language acquisition. UK: Cambridge University Press.
- Gee, J.P. (2004). Reading as situated language: A socio-cognitive perspective. In R.B. Ruddell& N.J. Unrau (Eds.), Theoretical models and processes in reading (Vol. 5, pp. 116-132). Newark, DE: International Reading Association.
- Hall, S.L., & Moats, L.C. (1999). Straight talk about reading: How parents can make a difference during the early years. Chicago, IL: Contemporary Books.
- Heath, S.B. (1983). Ways with words language, life, and word in communities and classrooms. New York, NY: Cambridge University Press.
- Holdaway, D. (1979). The foundations of literacy. Sydney, Australia: Ashton Scholastic.
- Juel, C. (1988). Learning to read and write: A longitudinal study of 54 students from first through fourth grade. Journal of Educational Psychology, 80, 437-447.
- Kamwangamalu, N.M. (1997). The Colonial legacy and language planning in Sub-Saharan Africa: The case of Zaire. Applied Linguistics, 18(1), 69-85.
- Krashen, S. (1985). The input hypothesis. London, UK: Longman.
- Krashen, S.(1987). Principles and practices in second language acquisition. New York, NY: Prentice-Hall.
- Krashen, S. (1988). Do we learn to read by reading? The relationship between free reading and reading ability. In D. Tannen (Ed.) Linguistics in context: Connecting observation and understanding (pp. 269-298). Norwood, NJ: Ablex.
- Lightbrown, P. M., and Spada, N. (1999). How languages are learned. Oxford: Oxford University Press.
- Long, M. (1985). Input and second language acquisition theory. In S. Gass and C. Madden (Eds.) Input in second language acquisition (pp. 377-393). Rowley, MA: Newbury House.
- Long, M., & Robinson, P. (1998). Focus on form: Theory, research, and practice. In C. Doughty & J. Williams (Eds.), Focus on form in classroom second language acquisition (pp. 15-63). Cambridge: Cambridge University Press.
- Malone, S. (2006). Planning community-based education programs in minority language communities. Bangkok, Thailand: SIL International.
- Mazrui, A. (1997). The World Bank, the language question and the future of African education. Race & Class, 38(3), 35-48.
- Mba, G.,&BlasiusAgha-ah C. (2000). Current trends and perspectives for mother tongue education in Cameroon. African Journal of Applied Linguistics (AJAL), 1, 1-21.
- McGee, L.M., &Richgels, D.J. (1996).Literacy's beginnings: Supporting young readers and writers (2nd ed.). Boston, MA: Allyn and Bacon.
- McLaughlin, B. (1984). Second language acquisition in childhood: Vol. 1. Preschool children (2nd ed.). Hillsdale, NJ: Erlbaum. (ERIC Document No. ED154604).
- Ministry of National Education, Republic of Cameroon. (2002). Decree N° 2002/004 of January 4th, 2002.
- Nkamba , M., &Kanyika, J. (1998). The quality of education: some policysuggestions based on a survey of schools(SACMEQ report No. 5). Lusaka, Zambia: IIEP, UNESCO.
- Norris, J.A., & Hoffman, P.R. (1990). Language intervention within naturalistic environments. Language, Speech and Hearing Services in Schools, 21, 72-84.
- O' Connor, R., Notari-Syverson, A., & Vadasy, P. (2005). Ladders to literacy: A kindergarten activity book. Baltimore, MD: Paul H. Brookes Publishing.
- Ouane, A., &Glanz, C. (2005) Mother tongue literacy in Sub-Saharan Africa(2006/ED/EFA/MRT/PI/75). Paris: UNESCO Institute for Education. Retrieved
- April 26, 2013 from http://unesdoc.unesco.org/images/0014/001460/146090e.pdf

Ouane, A., &Glanz, C. (Eds.) (2011). Optimizing learning, education and publishing in Africa: The language factor. Hamburg, Tunis: UNESCO Institute for Lifelong Learning (UIL), Association for the Development of Education in Africa (ADEA) / African Development Bank.

- Perfetti, C., Beck, I., Bell, L., & Hughes, C. (1987). Phonemic knowledge and learning to read are reciprocal: A longitudinal study of first grade children. Merrill-Palmer Quarterly, 33, 283-319.
- Pflepsen, A. (2011). Improving learning outcomes through mother tongue-based education. Retrieved from RTI International, May 10, 2013 from https://www.rti.org/brochures/eddata ii mother tongue instruction.pdf
- Pica, T. (1994). Research on Negotiation: What does it reveal about second language learning conditions, processes, and outcomes? Language Learning, 44(3), 493 527.
- Ramsey, P. G. (1987). Teaching and learning in a diverse world. New York, NY: Teachers College Press. (ERIC Document No. ED388729).
- Roth, F.P., Speece, D.L., Cooper, D.H., & De La Paz, S. (1996). Unresolved mysteries: How do metalinguistic and narrative skills connect with early reading? Journal of Special Education, 30(3), 257-277.
- Saville-Troike, M. (1982). The development of bilingual and bicultural competence in young children.In L.G. Katz (Ed.), Current topics in early childhood education (Vol. 4). Norwood, NJ: Ablex. (ERIC Document No. ED250100).
- Schleppegrell, M.J. (2004) The Language of schooling: A functional linguisticsperspective. Mahwah, NJ: Lawrence Erlbaum. Share, D.L., Jorm, A.F., Maclean, R., & Matthews, R. (1984). Sources of individual differences in reading acquisition. Journal of Educational Psychology, 76, 1309-1324.
- Slavin, R. (2003). Educational psychology: Theory and practice. Boston, MA: Pearson Education.
- Swain, M.(1993). The output hypothesis: Just speaking and writing aren't enough. The Canadian Modern Language Review,50(1), 158-164.
- Swain, M. (1995). Three functions of output in second language learning. In. G. Cook and G. Seidhofer (Eds.) Principles and practices in applied linguistics: Studies in honor of H. G. Widdowson (pp. 125-144). Oxford: Oxford University Press.
- Swain, M. &Lapkin, S. (1995). Problems in output and the cognitive processes they generate: A step towards Second Language Learning. Applied Linguistics, 16(3), 371-391.
- Tabors, P. (1997). One child, two languages.Baltimore, MD: Paul H. Brookes Publishing.(ERIC Document No. ED405987).
- Tambulukani, G., Sampa, F., Musuku, R., &Linehan, S. (1999). Reading in Zambia: A quietrevolution through the primary reading programme. In S. Manaka (Ed.), Proceedings of the 1st Pan-AfricanConference on Reading for All (pp. 170–175). Pretoria, South Africa: International Reading Association, READ, & UNESCO/DANIDA.
- Teale, W.H. (1984). Reading to young children: Its significance for literacy development. In H. Goelman, A.A. Oberg, & F. Smith (Eds.), Awakening to literacy. London, UK: Heinemann.
- Teale, W., &Sulzby, E. (1986). Emergent literacy: Writing and reading. Norwood, NJ: Ablex.
- Tharp, R.G., & Gallimore, R. (1988). Rousing minds to life: Teaching, learning, and schooling in social context. Cambridge, UK: Cambridge University Press.
- Torgesen, J.K., Wagner, R.K., &Rashotte, C.A. (1994). Longitudinal studies of phonological processing and reading. Journal of Learning Disabilities, 27, 276-286.
- Vygotsky, L.S. (1962). Thought and language. Cambridge: MIT Press.
- Vygotsky, L.S. (1978).Mind in society: The development of higher psychological processes. Cambridge, MA: Harvard University Press.
- Zobl, H. (1982). A direction for contrastive analysis: The comparative study ofdevelopmental sequences. TESOL Quarterly, 16, 169-183
- Walter, S.L. (2007). Mother tongue-based education in developing countries:Some emerging insights (GIAL/SIL). Retrieved April 26, 2013 from http://www.globalpartnership.org/media/library/blog/Steve-Walter-Mother- TongueInsights.pdf
- Watson, R. (2001). Literacy and oral language: implications for early literacyacquisition. In D.K. Dickinson & S.B. Neuman (Eds.), Handbook of early literacyresearch (Vol. 1, pp. 43-52). New York, NY: The Guilford Press.
- Wood, D., Bruner, J.S, & Ross, G. (1976). The role of tutoring in problem-solving. Journal of Child Psychology and Psychiatry, 17, 89 100.