Juggling between two languages in kindergarten classrooms: A multi-case study

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Abstract

Although, earlier research points to the significance of bilingual medium of instruction in early childhood settings, there is limited multicase research that explores mediums of instruction used in Kindergarten classrooms located in various socio-cultural contexts. To deal with this gap in the literature, a qualitative multi-case study into the perceptions of four kindergarten teachers in two Ghanaian schools, Tata and Kariba, was carried out over a six-month period. One research question guided the study. What medium of instruction do teachers use in kindergarten classrooms? Post-colonial theory and Vygotsky (1978) socio-cultural theory informed the study. Data used were semi-structured individual interviews and pair-based interviews and fieldnotes of classroom observations. Both within and across case interpretative analysis, as outlined by Stake (2006), was used. The findings of this study revealed these teachers used Ghanaian socio-cultural contextually relevant language of instruction (English language, Nfante language) in their various classrooms because it enhanced, promoted and improved children's understanding of concepts taught in class.

Keywords: Language; Post-Colonial; Socio-Cultural; Theory; Vygotsky; Fante; English

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1. Introduction

Several studies (Heyneman and Loxley, 1983; Lockheed et al., 1989; Stephens, 1991) carried out around quality early childhood education in developing countries appear to focus on issues bothering on pedagogy; such as the lack of teaching, learning resources, inadequate teachers, and poor infrastructure, with little attention paid to the use of medium of instruction, as a result little is known about how the new bilingual language policy (MoE, 2003) are impacting effective teaching and learning in early childhood settings. Furthermore, quality early childhood education has traditionally been associated with children's performance and the extent to which they progress to other levels of education. As a result literature (Howie et al., 2008; Ngweru and Opoku-Amankwaah, 2010; Opku-Amankwaa and Brew-Hamond, 2010; Erling et al., 2016) on the impact of multilingual medium of instruction on children's learning is rich, but because of the quantitative nature of these studies, the literature does not capture the intricacies associated with how it enhance, improve and promote children's understanding of concepts taught in class. That is, because of the qualitative nature of the current study, the finding is likely to provide further details regarding effectiveness of bilingual medium of instruction.

A major point of difference between the previous studies (Opoku-Amankwaah and Brew-Hammond, 2011; Ankama et al., 2012) and the current study is that the participants are drawn from kindergarten classrooms located in different socio-economic contexts. Thus, the multi-case study approach is likely to provide insight into the kind of medium of instruction that is appropriate for each of the contexts. That is the language of instruction and the extent to which it improves and promotes children's understanding of concepts in each of the study context would be unearthed and established.

Past research on bilingual medium of instruction has concentrated on only one broad issue; specific research context factors. Considering the issue of rural and urban divide and the corresponding medium of instruction for each context, the literature is almost silent on the details regarding how children's socio-cultural contexts determine the appropriate medium of instruction for a kindergarten setting. Consequently, we have an incomplete picture of the way a medium of instruction is determined for a kindergarten classroom setting. Against this background, the purpose of this research is to answer the research question: "How do teachers interpret and apply developmentally appropriate practices through mediums of instruction in kindergarten classrooms?"

The paper has four parts. First, it reviews the extant literature relevant to mediums of instruction. Then the research methodology is presented and data analyses techniques are discussed. Next, the findings are discussed. The paper concludes with a discussion of theoretical implications and directions for future research.

2. Theoretical framework

This paper is framed by postcolonial theory and Vygotsky's socio-cultural theory. Each of these theories give insights into reasons bilingual medium of instruction is a common feature in early childhood settings in Ghana. The colonial period in Ghana has ended but its footprints are still noticeable in many facets of Ghanaian society such as early childhood curriculum in terms of the use of English language as a medium of instruction (Kumar,

2000). However, several authors (Jordao, 2008; George et al., 2011; Asghazadeth, 2017) argue that postcolonial theory is significant in educational discourse because it provides a platform for us to question practices in schools that are largely influenced by colonial legacies. The main thrust of postcolonial theory is to create the awareness about the effect of foreign language, as medium of instruction and its concomitant effect on children understanding of concepts taught in class which in turn, affect children's application of what they learn in class. It further pushes the theoretical edges of the discourse and further rearticulate new insights and challenges arising from the need to introduce children to a language which has a global appeal. The footprints of imperialist powers continue to influence the educational systems of many developing. For instance, a review of several literature (Foucault, 1980; Bahba, 1983; Luke, 1986) suggest that English is becoming a universal language is learnt in many schools across the globe. The current language policy in Ghana which emphasises English language and mother-tongue based medium of instruction in early childhood classrooms settings reinforces the notion that colonial legacies continue to influence the educational system of former colonies of imperialist powers such as Ghana. It is therefore, imperative to engage in discussion which shed light on the extent to which post-colonial theory continue shape and influence classroom discourse in kindergarten settings within the Ghanaian context. However, it can further be argued that the use of mother-tongue based medium of instruction in early childhood classroom suggests that socio-cultural constructs of any given society (Vygotsky, 1978) determines the purpose and use of medium of instruction or discourse in early childhood settings. However Gee (1990) argues that discourse is a blend of a what an individual says, does, thinks and values regarding an issue. Thus, language is socially constructed practice that is closely linked to a group of people within a particular socio-cultural context.

3. Research context

3.1. Reforms for the development of mother-tongue education in Ghana

The history of language in education policy in Ghana has been a chequered one. According to Rosekrans, Sherris, and Chatry-Komarek (2012), the language in education policy cuts across two strands: English language only medium of instructions in classrooms (1957-1966; 2000-2005) on the one hand, and Ghanaian language for the first three years of schooling (1967-1969;1974-2002) on the other hand.

Rosekrans et al. (2012) argue that the English-only language policy of 2005 appears to have failed to have the desired impact on children's learning in classrooms because of some flaws inherent in the policy. They further maintain that even though the English language is spoken widely in many parts of Ghana, it appears to be limited to urban centres. Most children speak one or two of the 44 Ghanaian languages at home and in their communities. Before children's enrollment in school, they have limited knowledge of the English language. Nonetheless, children are expected to understand whatever the class teacher is teaching in a language they do not understand. Moreover, they are expected to read and write in English. The challenge for such children is pointed out by Canagarajah (2005) "clear grounding in a location gives us the confidence to engage with knowledge from other locations as we deconstruct and reconstruct with our purposes" (p.15). When children are taught in their mother tongues, it gives them a foothold to develop the target language (English language).

Opoku-Amankwaah (2009) observes that a Ghanaian language-only policy for the first three years of schooling provided room for 11 Ghanaian languages to become mediums of instructions in early childhood settings throughout the country. These included Akan (Twi and Fante), Nzema, Ga, Ga-Adangbe, Ewe, Gonja, Kasem, Dagbani, and Dagaare. In contrast, Opoku-Amankwaah (2009) and Rosekrans et al. (2012) assert that the Ghanaian language-only policy has failed to "activate the voices of thousands of children who have been voiceless in the classrooms" (p.7) because it was limited to only a few Ghanaian languages.

3.2. Emergence of a new language policy for mother-tongue instruction

Rosekrans et al. (2012) argue that there were several large-scale attempts in the past to introduce a mother tongue-based medium of instruction in Ghana (non-formal education and shepherd schools). None of these attempts proved successful due to financial constraints and the lack of political will. However, in the words of Hornberger (2009), "Opening up spaces for multilingual education is like considering all languages in the ecology and recognising that these languages are situated in spaces and contexts" (p.6). In light of this assertion, factors such as international pressure and donor support influenced the decision of the Government of Ghana to introduce bilingual education nationwide. The language policy currently in effect in Ghana is referred to as the "National Literacy Acceleration Programme (NALAP). The policy is under the auspices of the Ghana Education Service, a sector under the Ministry of Education.

3.3. Thrust of the bilingual medium of instruction

According to Rosekrans et al. (2012) and the Ministry of Education (2013) the National Literacy Acceleration Programme (NALAP) is a bilingual medium of instruction that is designed to guide mother tongue instruction and the transition of children to the English language. This policy further outlines that children from kindergarten up to Grade 3 of primary school would receive instruction in their Language and Literacy courses in both their mother tongue and English at the same time. Also, children are expected to spend five years of their education learning their mother tongue (L1). Consequently, kindergarten children and those in primary are expected to spend 90% and 70% of their time learning through their first language, (L1), while 10% and 30 % respectively of their time are spent learning the English language. Also, the time children spend learning the English language was to gradually increase until parity was achieved between the times spent learning the children's first language (L1) and the English language.

4. Method

4.1. Participants

The study consisted of 4 participants (Kate and Sophia from Tata School; Ramatu and Akotia from Kariba School) purposively sampled from two kindergarten classrooms sited in different socio-economic contexts within the Cape Coast Metropolis, Ghana. . Kate, has taught for 25 years while Sophia has taught for 19 years. Ramatu has taught for, 9 years, Akotia on the other hand has taught for 7 years. While both Kate and Sophia

have bachelors' degrees in early childhood education, Ramatu and Akotia on the other hand, have diploma in early childhood education. A multi-case qualitative study approach was used in this study because I want to establish the differences regarding teachers' practices in Tata School and Kariba School sited in different socio-economic settings.

4.2. Instruments

Two main instruments were used for this study. These included semi-structured interviews and observations. The interviews made it possible for the researcher to gain insights into participants' perspectives about their practices in kindergarten classrooms. The participants were interviewed in pairs once and individually twice. Interviewing teachers in pairs provided a platform for them to share their rich experiences each other and the researcher as well. Other reasons for interviewing the researcher several times included the following; first, it enabled me to establish the consistencies of the responses of the participants across the interview sessions. It allowed for the interviewees to talk at length and elaborate because they were given the opportunity to react to questions multiple times. It allowed the interviewees to talk at length and elaborate because they were given the opportunity to react to questions multiple times. The interviews were conducted at a time when children were on break. In all, each of the visits to the classrooms lasted one hour. In the second phase, observation took place in all the two kindergarten classrooms.

The observations provided an opportunity for me to determine how teachers' level of knowledge about their practices unfolded in real-life classroom context. During my observations, on occasion, and in an unobtrusive manner as possible, I conversed with the kindergarten teachers while the children were engaged in certain small group activities or individual activities to seek clarifications from them reasons for engaging children in various kinds of activities. After, the end of every lesson, I engage them in a discussion for about ten minutes to seek further clarifications on certain issues. This process of interacting with the teachers provided each one of them an opportunity to clarify an issue that was perplexing to me arising while observing the teachers' instructional practices in the classrooms. That is during these sort of activities, each of the teachers were seen moving from one group to another giving guidance to the children on how to accomplish a task whenever any of them encountered a challenge. This method provided an opportunity for me to observe and interact with the teachers two or three times during the study. Because my focus in this study is to explore teachers' perspectives about their practices in the classrooms.

Field notes rather than recording, reduced such intrusions. Such observations allowed me to enactment of issues beyond self-reporting because how teachers describe their actions and how their actions unfold in real-life teaching and learning context differ. The observations of the teachers were done after each of the teachers have been interviewed. Apart from been a technique of for generating primary data, observations serve as a check on the other data collection method. This method was used to check individual biases that likely to be exhibited in the in-depth interviews. Also, the gathering of data using two research instruments allow for triangulation of data.

4.3. Procedure

The instruments were administered to the participants in the two case schools from May 2015 to November 2015. The data analyses were on case by case basis to identify key themes within each of the cases to answer the research questions. The teachers' thoughts were audio recorded and transcribed verbatim. The teachers' thoughts were further organised into categories. The themes that emerged from the analyses were further validated by the observational data. In short, the themes were determined through open and axial coding (Boeijie, 2010). From the analyses above, it can be concluded that a theme is a pattern across data sets that is important to the description of a phenomenon which is linked to a research question.

5. Results

In particular, the study's results are reported as follows: the case of two teachers at the southern school, Tata; the case of two teachers at the northern school, Kariba; and finally, a cross-case analysis.

5.1. Case study analyses of the teachers at the southern school (Tata)

5.1.1. English language as a medium of instruction

Teachers at Tata School used English language as a tool for interpreting and applying DAP in kindergarten classrooms. Both Kate and Sophia perceived English language as an effective medium for helping children understand concepts taught in class. As they explained:

> *Kate: I use English Language in class because the children are coming from homes that they speak English already. And they go to day care centres where they are taught in the English language. There are children here who cannot speak their mother tongue.*

> *Sophia: The children use the English language everywhere they go...with their parents at home when they go to church and when they come to school too. Also, they come from diverse cultural backgrounds. For example, some are Ewes, some are Fantes and others are Ashantis. So, if I am to use a local language in class, it will be difficult for the children to understand what I will be teaching in class.*

Thus, both Kate and Sophia acknowledged that the children at Tata School had strong English-speaking backgrounds because of the homes and communities from which they came. Moreover, in a multilingual setting, as Sophia described the situation at Tata School, she believed that it is extremely difficult for kindergarten teachers to use one of the Ghanaian languages spoken in that community as a medium of instruction in a kindergarten classroom. Thus, the predominant language that most the children understood (English) served as the medium of instruction, in turn, it promoted children's understanding of concepts taught in class. Thus, it appeared appropriate for the teachers to use English language as a medium of instruction in that context.

5.2. Case study analyses of the teachers at the northern school (Kariba)

5.2.1. Fante language as a medium of instruction

The teachers at Kariba School used the children's mother tongue (Fante language) as a basis for interpreting and applying DAP in their kindergarten classroom. For example, both Ramatu and Akotia perceived that Fante language promoted children's learning of the target language (English language).

> *Ramatu: I teach the children in their mother tongue because it helps them to master certain concepts in English language. I use Fante language to introduce children to the English language versions of Fante concepts, and this helps them to understand concepts in the English language. Also, the children feel comfortable and confident expressing their views in class.*

> *Akotia: I use the mother tongue to develop the language skills of children in the English language such as the spoken and the written aspects. The children understand a lot of concepts in their mother tongue because it is a common language spoken in every part of their environment such as at home, at school, churches, mosques, and within their neighbourhoods. So anytime I teach them a concept in Fante, I bring in the English version of it, and this helps them to understand concepts in the English language.*

Thus, Ramatu and Akotia immersed their children in a bilingual learning environment. As for Ramatu, valuing children's mother tongue as medium of instruction was appropriate because it was the language commonly spoken in their environment thus, it enabled the children to express their views in class regarding concepts taught in class. As Akotia pointed out, using children's mother tongue in conjunction with English helped them develop the target language(English language).

5.3. Across case analyses of mediums of instruction at Tata and Kariba schools

To further understand the kind of mediums of instructions used in both schools, across-case analyses (by school) is reported next.

All 4 participants in the study perceived that children's socio-cultural contexts determined the language of instruction that kindergarten teachers are required to use in kindergarten settings. However, for helping the children understand the concepts taught in class, the participants used multiple mediums of instructions in kindergarten classrooms. For instance, while the teachers at Tata School used the English language, the teachers at Kariba School, used the Fante language. That said, looking at both cases, the language of chosen aligned with the teachers' perception of the language that was most familiar to the children. And since, it is more likely that Fante would be the dominant language in the rural settings, and English likely commonly spoken in urban settings, it would seem that the location of the kindergarten was a key determinant of the language of instruction that should be given much emphasis in kindergarten settings. This seems to explain why the teachers in Tata School and those in Kariba school used a different language of instructions in their classrooms.

6. Discussion

As the findings revealed, the dominant language of instruction in the urban and rural kindergarten differed accordingly, with the teachers at Tata School using English and the teachers at Kariba School using Fante. More specific to DAP, it appears that the teachers immersed their students in a language culture that was commonly found in the children's environment. As such, these teachers' interpretation and application of developmentally appropriate practices align with Vygotsky's (1978) assertion that the predominant language within a particular sociocultural context serves as a basis for initiating young children into the culture of any given society. Indeed, these teachers recognized that using the language that is "commonly spoken in the children's immediate environment," (Kate and Sophia, Tata school) allowed the children to articulate their views on issues they discussed in class, a view which parallels Vygotsky's (1978) theory that expressing an idea is essential for real understanding. We see here then that these teachers were familiar with the theories underlying DAP and readily invoked them to bolster their interpretation and application of DAP.

Of interest also is the impact on instruction related to the teachers' DAP. For example, the participants acknowledged that most of the instructional materials relating to language and literacy were written in the Fante language. Thus teachers in the urban school had to translate the inscriptions from the "Fante language into the English language before the children would understand certain concepts" taught in class. Thus their decision to honour their children's English development, they took on additional work. In contrast, teachers in the rural school (Ramatu and Akotia from Kariba School) used the children's mother tongue, the Fante language as a medium of instruction and thus no additional translation was needed. Thus, the current study suggests that a developmentally appropriate medium of instruction may not necessarily be the mother-tongue, but rather the community used language that matters. As such this study's findings both concur and contest the assertion that mother tongued-based instruction presents a more worthwhile learning environment for children because learning within the school setting in effect is an extension of their experiences at home (Igamu and Ogiegbaen, 2007).

While the dominant language in each classroom differed, in both cases teachers offered their children a bilingual learning environment. As such, these teachers' interpretation and application of DAP when juxtaposing within the framework of the language policy in Ghana warrants further discussions. According to Rosekrans et al. (2012) and the Ministry of Education (2013) the National Literacy Acceleration Programme (NALAP) is a bilingual medium of instruction which is designed to do two things: provide guidance on mother tongue instruction and also to facilitate children's transition into using the English language. The policy, also specifies that children from kindergarten to primary three should receive instruction in Language and Literacy in both their mother tongue and in the English language at the same time. At the kindergarten level, the children, are expected to spend 90% of their time learning through their first language (L1, Fante). In part, this may explain why the teachers at Kariba School put so much emphasis on the Fante language and less on using the English language in their classroom. However, at Tata school, the opposite was the case. Consequently, it appears bilingual education was practised in these two kindergarten classrooms in Ghana because it promotes children's development, and less so because of policy. Both sets of teachers used the child's more commonly spoken language to support their success while incorporating the other language in ways to assist students'

understanding. That is when English was the main language, teachers pointed to Fante posters, etc. and assisted the children in seeing the connection with the English counterpart. While attending to children's language strengths is laudable, this finding also points to the complicated nature of policies which attempt to restore or revitalise mother-tongue in nations, where colonialism and globalism have diminished its value. It was unclear from the data how strongly committed the teachers in urban centres were to this goal. Likewise, in the rural setting, these teachers raise the complexity of valuing and supporting a mother-tongue when indeed in their jurisdiction the children spoke many different dialects/languages aside from Fante and English in their communities. And thus in these early childhood setting meaning making requires a sensitivity to the individual child's development.

7. Conclusion and recommendation

Based on the major findings discussed above, some key points were notable about the mediums of instruction used by the teachers in the schools. For instance, it is apparent from the study that the socio-cultural backgrounds of the children and their contexts (language, curriculum and pre-designed materials) influence the medium of instruction choice and its implementation in kindergarten classrooms. This suggests that within a seemingly apparent unifomity, there exist diversity and differences. Thus, the study's findings reinforce and in a limited way extend the constructivist theories that consider sociocultural contexts of children as key determinants of kindergarten curriculum content and the way it is taught. As the findings of the present study illustrate, kindergarten teachers in both rural and urban settings used the predominant language within a particular cultural setting as a medium of instruction in their kindergarten classrooms. However, additional studies are needed to determine, for example, which medium of instruction teachers use in kindergarten classrooms in communities (Ghanaian or otherwise) where children of refugees (i.e.Ivorian) in Ghana attend school.

References

Andreotti, V. (2011), *Actionable post-colonial theory in education*, Pal Macmillan, New York.

Bhabha, H.K. (1983), "Diffrence, discrimination and discourse of colonialization", In: F. Parker (Ed), *The politics of theory*, University of Essex.

Canagarajah, A.S. (2005), "Dilemmas in planning English/Vernacular relations in post-colonial communities", *Journal of Sociolinguistics,* Vol. 9 No.3, pp. 418-427.

Dei, G.J.S. and Asgharzadeth, A. (2001), "The power of social theory:Anti-colonial discursive framework", *Journal of Educational Thought,* Vol. 35 No.3, pp. 297-323.

Erling, E.J., Adinolfi, L., Hultgren, A.K., Bulkler, A. and Mukorera, M. (2016), "Medium of instruction policies in Ghana and Indian primary schools: an overview of key issues and recommendations", *Comparative Education,* Vol. 52 No. 2, pp. 294-310.

Foucalt, M. (1980), In C. Gordon(Ed), *power/knowledge*: *Selected interviews*, 1972-77, Brighton: Havester Press.

Furguson, G. (2003), "Classrooms code-switching in post-colonial contexts:Functions, attitudes and polcies", *African and Applied Linguistics,* Vol.16 No.6, pp. 65-76.

Gee, J.P. (1990), *Social linguistics and literacies:Idealogy in discourses.*Hamsphere, Fulmer Presss.

Heyneman, S.P. and Loxley, W.A. (1993), "The effect of primary school quality on academic achievement across twenty-nine high and low-income countries", *American Journal of Sociology,* Vol. 88 No.6, pp. 128-236.

Hornberger, N.H. (2009), "Multicultural education policy and practice: Ten certainties (grounded in indigenous experiences)", *Language and Teaching*, Vo. 12 No. 4, pp. 223-228.

Howie, S., Venter, E. and van Straden, J. (2008), "The effect of multilingual policies on development and progression in reading literacy in South Africa primary schools", *Education Research and Evaluation,* Vol. 14 No. 6, pp. 551-560.

Hudson, R. (2003), "Fuzzy concepts and sloppy thinking: Reflections on recent development in critical regional studies", *Regional Studies*, Vol. 37 No. 1, pp. 741-746.

Iyamu. F.O.S. and Ogiegbaen, E.A. (2007), "Parents and teachers' perception of mother tongue medium of instruction in Nigeria primary school schools", *Language, Culture and Curriculum,* Vol. 83 No.1, pp. 300-321.

Kumar, M. (2000), "Postcolonial theory and cross-culturalism: Collaborrative 'synposts' of discursive practices"*, Journal of Inquiry,* Vol. 1 No. 2, pp. 65-76.

Lockheed, M.E., Vespor, A.M., Block, D., Englebert, P., Fuller, B., King, E., Middleton, J., Paqueo, V., Rodd, A., Roman, R. and Wilmon, M. (1991), *Improving primary education in developing countries*, The World Bank, Washington, DC, 20433.

Luke, A. (1996), "Genres of power?, literacy education and the production capital", In: literacy and society (308-338), Longman, London.

Ministry of Education (2013), *Education reforms in Ghana*, Ministry of Education, Ghana.

Ngweru, J.M., Marriote, J. and Opoku-Amankaah, C. (2010), "Home and school literacy practices in Africa: Listening to inner Voices", *Language and Education,* Vol. 24 No. 4, pp. 295-307.

Opoku-Amankwaah, C. (2009), "English-only-language in education policy in multilingual classroom in Ghana. *Language, Culture and Curriculum",* Vol. 22 No.2, pp. 121-133.

Opoku-Amankwaah, K. and Brew-Hammond, A. (2011), "Literacy is the ability to read and write English': Defining and developing literacy in basic schools in Ghana", *International Journal of Bilingual Education and Bilingualism,* Vol. 14 No. 1, pp. 89-106.

Pedro, M. and Woodrow, C. (2014), "Improving the quality of early childhood education in Chile: Tension between public policy and Teacher discourses over scalarisation of early childhood education", *International Journal of Early childhood*, V. 46 No. 1, pp. 101-115.

Rosekrans, K., Sheris, A. and Chatry-Komarek, M. (2012), "Education reforms for the expansion of mother-tongued education in Ghana", *International Review of Education,* Vol. 58 No.1, pp. 595-618.

Stake, R.E. (2006), *Multiple case study analysis*, Guildford Press, London.

Stephen, D. (1991), "The quality of primary education in developing countries: Who defines and who decides", *Journal of Comparative Education,* Vol. 27 No. 2, pp. 223-233.

Vygotsky, L. (1978), Mind and society: The development of higher psychological processes, Harvard University Press, London.