

*Full Length Research Paper*

# Unpacking instructional strategies of early childhood teachers: Insights from teachers' perspectives

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Even though previous research points to the significance of early childhood teachers' practices that take into consideration the nature of children and how they learn, there is limited research regarding how instructional strategies impact children's development in diverse ways. To close this gap in literature, a qualitative multi-case study into the perceptions and classroom practices 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, namely, which instructional strategies do teachers use in a kindergarten classroom? Data used were semi-structured individual interviews and pair-based interviews and fieldnotes of classroom observations. Both within and across case interpretative analysis, as was used. The findings of this study revealed these teachers believed that instructional strategies impacted children's development in different ways; they pointed to play-based instruction and integration as well as specific strategies such as picture-walk and think-pair-share that they believed promoted effective teaching and learning in kindergarten classrooms which in turn, enhanced and promoted children's multiple intelligencies in terms of socio-emotional, physical, cognitive and language development.

**Key words:** Childhood, qualitative, cognitive, play, integration, kindergarten, instruction, strategies.

## INTRODUCTION

Little research has been carried out in the area of instructional strategies teachers use in early childhood settings. Although, there are multiple studies dealing with issues such as effectiveness of developmentally appropriate practices (DAP) (Eisenhart, Cuthbert, Shrum, Harding, 1988; Elkind, 1989; Hayson, Hirst-Pasek and Rescorla, 1996; Jones and Guldo, 1999; Epstein, 2007), teachers' practices in kindergarten classrooms, (Hyson, Hirsh-Pasek and Rescorla, 1990; Maxwell, MacWilliam, Hemmeter, Ault and Shuster, 2001; Hedge and Cassidy, 2009), and teachers' beliefs and practices (Charlesworth

et al., 1993; McMullen et al., 2005; Hedge and Cassidy, 2009b; Parker and Neuhart-Prichett, 2009; Abu-Jaber et al., 2010; Sakellariou and Rentzou, 2011; Riojas-Cotez et al., 2013), there are few empirical studies that identify specific significance of one instructional strategies for children's development over the other. Moreover, previous studies focused on how teachers beliefs influenced their choice of instructional strategies. However, the current study explores how the instructional strategies outlined in the kindergarten curriculum impact children's development. To enhance and promote effective

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teaching and learning in early childhood settings, this gap in early childhood literature must be filled.

Instructional strategies contribute to effective teaching and learning in early childhood classrooms, which in turn, impacts children's development in diverse ways. In an effort, to identify the impact of instructional strategies on children's development, past research focused on integration and play-based pedagogy (McMullen et al., 2005), which revealed that play impacted children's cognitive and socio-emotional development. But because of the quantitative nature of the study (Marshall and Rossman (2016), the literature is almost silent on details regarding the impact of these strategies as well as others enhance, promote and improve children's holistic development in early childhood settings. Consequently, there is an incomplete picture with respect to how these strategies impact children's development. A nuanced study is therefore, needed to unearth these subtleties. That is, the current research attempts to employ a qualitative research approach to identify specific instructional strategies and how they impact children's development in Ghanaian kindergarten settings in diverse ways because some of the strategies are designed to address specific developmental needs of children but they are under-researched. Against this background, the purpose of this research is to answer the research question: "What instructional strategies do teachers use in a kindergarten classrooms?"

### Theoretical framework

Cognitive constructivist theory (Piaget, 1951) and sociocultural theory (Vygotsky, 1978) informed the research. The theories of Piaget (1972) and Vygotsky (1978) are referred to as the cognitive constructivist theory of learning and sociocultural theory of learning respectively. While the former's version of constructivism sees the child as a solitary learner, who constructs knowledge within a social setting, the later perceives the learner as someone who constructs knowledge within a social context through the collaboration with others. Since these theories which are related to DAP, constitute the basis of constructivist principles of teaching in early childhood classrooms, they have been invoked to frame the current study. First, from birth to two years, Piaget argue that children are at the sensory motor stage when they develop perceptual and tactile senses. Second, from two to seven years' children are within the pre-operational stage when they are likely to make use of visual images or picture imagery and words to represent their thoughts. This finding gives us insights into the kind of instructional strategies that are appropriate for developing intellectual skills of young children in early childhood settings. Vygotsky (1978) further argues that children's intellectual abilities are broadened via play and reflections on their actions during early childhood years. As children engage in play activities, they emulate adult

examples. The impact of play on children is succinctly expressed by Vygotsky (1978) when he asserts that "In play, a child is always above his average age, above his daily behaviour, in play, it is as though he were a head taller than himself" (p.129). Thus, children through play emulate socio-culturally defined activities which have been set aside solely for older people in society. Play creates a platform for children's intellectual development because play activities that children create stem from real life issues that they encounter daily in their environment. However, by incorporating implicit rules into their play activities, children tend to learn the basics of abstract thinking (note: children's play has different interpretations; dramatic play, free play, onlooker play, solitary play, associative play, parallel play, and cooperative.

The paper has three parts. First, the research methodology are presented and data analysis techniques are discussed. Next, the findings are discussed. The paper concludes with a discussion of theoretical implications and future directions for further research.

### METHODOLOGY

#### 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 there is need to establish the differences regarding teachers' practices in Tata School and Kariba School sited in different socio-economic settings.

#### 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 with each other and the researcher as well. Other reasons for interviewing the researcher several times included the following; first, it enabled the researcher to establish the consistencies of the responses of the participants across the interview sessions. It allowed 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 for one hour. In the second phase, observation took place in all the two kindergarten classrooms. After the transcriptions of the interviews, the teachers were given opportunity

to cross-check whether the transcripts reflect their views (member checking) The observations provided an opportunity for the author to determine how teachers' level of knowledge about their practices unfolded in real-life classroom context. During observations, on occasion, and in an unobtrusive manner as possible, the author 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, the author engaged 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 the author while observing the teachers' instructional practices in the classrooms. That is during these sorts of activities, each of the teachers was 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 to observe and interact with the teachers two or three times during the study. Because the 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 enact 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 recorded after each of the teachers was interviewed. Apart from been a technique for generating primary data, observations serve as a check on the other data collection method. This method was used to check individual biases that are likely to be exhibited in the in-depth interviews. Also, the gathering of data using two research instruments allow for triangulation of data.

### **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 for the description of a phenomenon which is linked to a research question.

## **RESULTS**

### **Case study analyses of the teachers at the Southern School (Tata)**

#### ***Instructional strategies***

Concerning the third research question, the analyses of the teachers' interviews transcripts and observations from field notes indicated that the two teachers used similar instructional strategies to promote children's development in their kindergarten classroom. Interestingly, these participants' views regarding instructional strategies for children's language development, as well as those for their holistic development pointed to two types of themes which were further validated by the observational data. The themes that emerged from these teachers'

comments included those referring to specific strategies aimed to teach specific subject areas which included picture-walk, think-pair-share and free play as well as generic ones which comprised play-based pedagogy and an integrated curriculum approach. Nonetheless, evidence from these teachers' responses is not enough for a conclusion to be drawn that either of them preferred play-based pedagogy or integration.

### **Subject area instruction and children's physical development**

Both Kate and Sophia perceived the development of children's language and literacy skills in a kindergarten setting as a function of the effective use of instructional strategies. However, they differed in their perceptions of the most suitable instructional strategy for doing so. For instance, Kate valued the use of a think-pair-share instructional strategy because "It helps children who are seated close to each other to talk among themselves about the subject matter before "I come in to ask a question."

Interestingly, Kate drew on her personal experience as a student to explain why she valued think-pair-share as an instructional strategy for supporting her kindergarten children's language and literacy development. Kate elaborated:

Kate: When we were in school whenever our peers explain certain concepts to us, we understood it better than that of the teacher. Even though the teacher might have done well but because we are peers and the language is within our level we understood their explanations better. ... [With think-pair-share] any time a child raises his or her hand to answer a question, he or she is confident that the answer might be right because the answer has already been talked about with a friend.

For Kate, the think-pair share is an effective instructional strategy for children's language development because it provided an opportunity for children to share ideas with their peers in class, thereby boosting children's confidence in responding to questions posed by the teacher in class.

Sophia pointed to picture-walk as an effective instructional strategy for teaching concepts in language and literacy class because it helped her to promote the development of the children's listening and speaking skills. She explained:

Sophia: Picture-walk instructional strategy in language and literacy uses a conversational poster to develop children's language skills, such [as] listening and spoken aspects. The poster contains different kinds of pictures depicting issues that children are expected to discuss in class. If the topic is about birthday celebrations, the

pictures will help the teacher to initiate a conversation with the children by asking questions.

Sophia further elaborated on how a low-risk atmosphere, in conjunction with the clues the picture provides, increased participation, and in her opinion, contributed significantly to each child's socio-emotional well-being. For, example:

Sophia: ...If the topic is about birthday's celebrations, the child develops vocabulary about the celebrations. It also removes shyness from the children. It also makes the child have a feeling of being part of the class because when it comes to conversation, children's contribution in class should not be turned down. So, whatever the child says is accepted, and we go ahead to applaud him or her so that the children will feel free to say whatever he or she wants to say in class.

For, Sophia, children actively participate in class activities if the views they express on issues in class are respected and appreciated. In addition, Sophia perceived free-play as an instrument for promoting the physical development of children. She explained:

Sophia: As for me, every week, I set a period aside for the children to go to the school's playground and engage in any play that they like. This type of activity is important for children because it promotes their physical development.

The analyses of the observation, field notes further revealed that Sophia played some supportive roles while the children were playing on the playground. For instance, before the children started playing, she talked to them about the various choices that were open to each of them and guided them individually to make their preferred choices. She stood at the edges of the playground moving back and forth and keenly observing what the children were doing without interfering. However, the teacher did take part in the play whenever she wanted to demonstrate to the children how to master a skill. Whenever she saw any of the children idling about, she prompted him or her by calling the child's name and entreating him or her to get involved in the activity. The teacher also made sure that every child actively participated in a play activity that was of interest to them. She applauded the children who were doing well in their various activities. She also provided opportunities for children to interact among themselves by playing in groups or beside each other. She also made interventions to prevent the children from harming themselves and gave assistance to the children whenever they encountered any difficulty starting a play activity.

### **Holistic instruction**

Kate and Sophia appear to have different views about

suitable instructional strategies for the holistic development of children in kindergarten settings. While Kate preferred a play-based approach, Sophia, valued the integrated approach. For instance, Kate valued play-based instructional strategies because as she explained:

Kate: I think at the kindergarten level, children learn better when activities are in the form of play. For instance, anytime I am teaching, I give children the opportunity to play a game that is related to what we are learning in class. I know play is something that is of interest to children. So, in most of the activities [in which], I engage children, I introduce some element of play into it to arouse children's interests in what they are doing.

The data from the observation field notes further revealed that during language and literacy class when Kate was teaching the children four letters of the alphabet, the teacher engaged the children in a game. The purpose of the game was to use a creative, play-based way to help the children to identify the sound of the letter 'A' and the other letters of the alphabet (B, C, and D) in the midst of other letter sounds. The teacher then read a sentence that had the letter 'A' repeated three times in the sentence. The children were expected to listen attentively and identify the letter name that corresponds to the letter sound. A child who can match a letter sound correctly with a letter name scores a point. In the subsequent rounds of the game, the teacher repeated letter sounds of the other letters one after the other and the children were expected to match the sounds with the names. The children were put into groups of five to compete among themselves on the identification of the name of a letter name and its corresponding sound. Sophia, valued the integrated approach to teaching in a kindergarten classroom because it situated learning in a real-life context. She explained:

Sophia: I use the integrated curriculum approach a lot when I am teaching certain topics in class because it provides a favourable learning environment for young children to learn. I think children by their nature learn through lived experiences within the home setting. So, when they are transitioning from their homes to school, there is a need for me to give them similar learning experiences to help them learn better.

For the kindergarten child, the daily experiences of living and learning in the classroom are indivisible. Thus, in a kindergarten class, learning should be structured in such a way that it becomes part and parcel of the total experiences of children's lives. From my observations, for Sophia, to make it possible for children to understand their world during teaching in kindergarten settings, she usually incorporated different, but obviously, connected curriculum areas into a single unit. For example, in language and literacy class, a story could become the basis for Sophia to plan integrated learning activities for

the children. The characters and settings in the story (e.g. Ananse, the Confidence Trickster) provided a natural way for the teacher to introduce the children to various concepts in moral education, religious education, numeracy, environmental studies, natural science and creative art.

In sum, from the data sets, it appears that the teachers from Tata School used a variety of instructional strategies to promote children's development in their kindergarten setting. However, the developmental needs of children informed the kind of instructional strategy that the teachers used in class. Specifically, evidence from the research suggests that the study's participants used think-pair-share and picture-walk instructional strategy to develop language skills of children while play-based and integration were used to promote children's holistic development. Moreover, through free play, the teachers provided an opportunity for children to develop physically.

### **Case study analyses of teachers at Northern School (Kariba)**

The second case study was conducted at Kariba School, which was sited in a rural setting. As in the previous case, the analyses of both teachers, Ramatu and Akotia, interview responses alongside observational data captured, produced several themes which address each of the four research questions.

#### ***Instructional strategies***

Concerning the third research question, the analyses of the teachers' interviews transcripts and the observations field notes indicated that the two teachers used similar instructional strategies to promote children's development in their kindergarten classroom. These included picture-walk; play-based approaches; and integrated curriculum approach, with the former strategy specific to content development.

#### **Subject area instruction**

While Ramatu and Akotia saw the development of children's language and literacy skills as a function of the effective use of a picture-walk instructional strategy, nonetheless, they differed in how they perceived its impact.

Ramatu: When I am teaching a topic such as the 'family' in language and literacy class I use picture-walk and role-play. First, I paste a conversational poster which has pictures depicting activities that go on in a family setting. As I flip through the picture, the children take turns to describes incidents in the pictures and predict what is likely to happen in the next picture. After this activity, I

call the children one after the other to play some roles their mother or siblings engage in at home. These activities help children to talk in class.

Akotia: I use picture-walk in language and literacy class to promote children's moral development. If the lesson is storytelling and it is about how tortoise beat the overconfident hare in a competitive race, I take the children through a conversational poster that has pictures depicting the various stages of the race. As I flip through the poster, I ask the children to comment on the various episodes of the story and the moral lesson that they can draw from it. By the time, I finish going through the pictures with them; they will be able to narrate the whole story.

For Ramatu, then, picture-walk provided an opportunity for children's oral language development, while Akotia saw picture-walk as a means of developing children's moral values through storytelling.

That said, both teachers, Ramatu and Akotia identified additional ways picture-walk impacted children's learning.

Ramatu: It helps children develop their oral skills, observational skills, and coordination skills because the children have to observe incidents depicted in the pictures before they can talk about them with their peers in class.

Akotia: I think it helps children develop the ability to imagine things, follow the sequence of events and predict their likely outcomes.

Thus, Ramatu spoke on skills development, while Akotia pointed to cognitive development as key outcomes of an instructional strategy such as picture-walk. Interestingly, Ramatu further explained what she meant as a coordination skill and its relevance for the children, within the social context of Kariba School. She explained:

Ramatu: When I talk about coordination skills, it is the movement of the eyes from left to right during reading. In this school, some of the children attend Arabic classes after school. In Arabic classes, children write from right to left. So, such children are often confused as for how to write in formal classroom settings. So, I use the inscription on the conversational poster, and with the aid of flip board, I help them understand how to read from left to right.

Thus, for Ramatu, because some of the children in her class have to adjusted to two diverse ways of writing (Arabic and English), she is cognizant of how using picture-walk can help the children overcome this challenge if the differences are made explicit.

#### **Holistic instruction**

Both Ramatu and Akotia valued instructional strategies which promoted the holistic development of children in

kindergarten settings. For, instance, Ramatu valued a play-based approach to learning in a kindergarten classroom because it promoted the social, emotional and cognitive development of children. She explained:

Ramatu: I use play-based approach to teaching a lot in this class because I have a strong feeling that the child's world is centred on the play. So, I rely on play-based activities to give children the opportunity to interact with their peers, express their emotions and develop their imaginative abilities.

Akotia, however, valued the integrated approach to teaching because it promoted the social-emotional and cognitive development of children. She explained:

Akotia: I often use the integrated approach a lot in this class. In this country, the goal of the kindergarten curriculum is to help the child become a well-balanced individual. So, in this class, I provide an opportunity for the children to interact with others, express their emotions, develop moral values, and develop their imaginative abilities and their motor skills.

The observation field notes further revealed that Akotia used an integrated approach during a language and literacy class which focused on a story entitled "The Lion and the Mouse" In this lesson, Akotia took the children through a conversational poster, which depicted the plot of the story in a pictorial form. The pictures highlighted episodes of the ungrateful nature of the lion. The children were expected to predict the consequences of the lion's actions and inactions. In addition, however, the teacher (Akotia) used the setting of the story to introduce concepts such as the number of animals in the story, the types of plants in the environment, the creator of the animals, and the number of plants they saw in the environment. Finally, the children were asked to draw one of the animals depicted in the story. Thus, the plot of the story, the setting of the story and characters in the story served as the basis for Akotia to use a literature-based integration, to introduce children to new concepts that cut across different subject areas.

Overall, from the data sets, it appears the teachers from Kariba School used a variety of instructional strategies to promote children's development in their kindergarten setting. However, the developmental needs of children informed the kind of strategy each teacher used in class. Specifically, evidence from the study suggests that the study participants used picture-walk instructional strategy to develop language skills and moral values of children while play-based pedagogy and integration were used to promote the holistic development of children.

### **Across case analyses: Teachers' practices at Tata and Kariba Schools**

To further understand the ways in which kindergarten

teachers perceived instructional strategies, across-case analyses (by school) is reported next. As expected, some of the themes reported within each case were unique to that case. However, most themes were shared by all four teachers in the study, regardless of the school setting in which they taught. Thus, to consider the analyses of the four teachers' (Kate and Sophia at Tata School; Ramatu and Akotia at Kariba School) perspectives with respect to instructional strategies, the themes derived from within-case analysis were collated and served as the basis for the cross-case-school analyses.

### **Instructional strategies**

For further insights into the kinds of instructional strategies the teachers used in their kindergarten classrooms, a cross-case analysis was reported. As envisaged, some of the themes reported within each case were peculiar to that case. Nonetheless, most of the themes were common to all four teachers in the study despite the school setting in which they taught.

The participants across cases valued play-based and the integrated curriculum approach as effective instructional strategies for the promotion of children's development in kindergarten classroom settings. As well, the picture-walk instructional strategy was common to all four of the teachers. However, they perceived its impact on children's development differently because, while Sophia at Tata School and Ramatu at Kariba School linked language learning to picture-walk, Akotia at Kariba School saw its value more generally regarding developing children's imagination. But across cases, a pair of teachers valued the play-based approach (Kate and Ramatu), and two valued the integrated approach (Sophia and Akotia). Thus, it appears that the choice of instructional strategy is based less on context and more on individual teacher's choice. Interestingly, looking at the cases then, it can be seen that children in each classroom were exposed to both play-based and integrated approaches, by virtue of having pairs of teachers.

### **DISCUSSION**

In the current study, these four teachers believed using diverse forms of instructional strategies promoted children's development. While there were differences and similarities regarding their individual choices, a common thread running through the strategies the participants reported (play-based and integrated pedagogy; picture walk and think-pair-share) was a focus on children's needs. That is, as detailed in the findings chapter, the teachers at Tata School and those at Kariba School indicated that they used these various instructional strategies in order to address the different developmental needs of their children. Indeed, the strategies, namely

play-based and integrative pedagogies, think-pair-share, and free play, to which these teachers pointed, are commonly found throughout the early childhood literature and closely aligned with developmentally appropriate practices (Bredenkamp and Copple, 2009). Likewise, these findings, at the very least, indicate that teachers, in both settings (rural and urban), were equally conversant with both generic (e.g. play-based, integrated) and specific (e.g. picture walk) developmentally appropriate practices promoted in Ghana's mandated curriculum.

Interesting, only two of the four teachers, namely Sophia, from Tata School and Akotia, from Kariba School, spoke of integration as an effective teaching and learning approach for kindergarten classrooms. As observed, each of them relied heavily on learning centres to integrate their children's experiences into the classroom and promote their children's holistic development. Although, the data collected was not conclusive, it appeared that these teachers' previous successful experiences with integration through learning centres influenced their instructional strategy choice. Of particular note was the similarity between their approach and that of Hauser et al. (2010) activation principle, which situates learning within the context of what the child already knows in order to facilitate the child's understanding of related concepts. Indeed, Sophia captured the integration of everyday experiences with those at school when she stated:

"I think children by their nature learn through lived experiences within the home setting. So, when they are transiting from their homes to school, there is a need for me to give them similar learning experiences to help them learn better."

This then suggests that these teachers believed such integrated learning activities positively impact children's learning, as was the case for young children in the study of McMullen et al. (2005). What remains unclear from the data, however, is whether this approach to integration, which Sophia and Akotia focused on in their separate interviews, was one of many approaches to integrating children's learning experiences, a dominant/preferred approach or these kindergarten teachers' only approach to integration. There were insufficient probes within the semi-structured interviews to fully determine the extent of their knowledge and understanding of how to interpret and apply other means of integration, and thus, the reader is cautioned not to assume it was a one-size-fits-all philosophy, without further research.

In contrast, all four participants spoke of play-based pedagogy as central to developmentally appropriate ways of promoting children's development in diverse ways. More specifically, they indicated that to do so, activities which specifically address the learning needs of individual children are designed to enhance, promote and improve certain areas of children's development. Indeed,

observational data documented various learning activities which these teachers engaged the children, in both settings, in diverse play-based experiences. For example, Kate and Sophia at Tata designed an activity, they labelled "wizard counter", to promote their children's socio-emotional development, while Ramatu and Akotia's (search and find) aimed to develop children's socio-physical aspects of their lives. Of note is that for the most part, these teachers used context-specific and relevant play-based activities to address certain perceived needs of their children. As such, these kindergarten teachers appear to interpret developmentally appropriate play-based pedagogy as teaching that is both informed by and supports children's individual needs. It would seem then that all four teachers concur with Bredenkamp (2014) who argued that children's holistic development (socio-emotional, intellectual and moral) can be effectively supported through play-based pedagogy because of the various forms of activities it encompasses. In addition, these teachers, as Ramatu reported, seemed to value the resonance such an approach has with children's inherent capacity to learn from and through play:

Ramatu: "I use play-based approach to teach a lot in this class because I have a strong feeling that the child's world is centred on the play. So, I rely on play-based activities give children the opportunity to interact with their peers, express their emotions and develop their imaginative abilities."

However, it is not surprising that these teachers point to the effective use of play-based pedagogy because their teacher education backgrounds and experiences would have included knowledge regarding such developmentally appropriate means of promoting children's holistic development. That said, the author argued that their nuanced understanding speaks of the participants' ability to make connections between such theoretical knowledge and practice, readily pointing to personal ways in which they apply instructional strategies within their classrooms. It is also noteworthy that this study of Ghanaian teacher's perceptions regarding instructional strategy usage in kindergarten classrooms corroborates the beliefs and practices of Japanese participants (six nurseries and four kindergarten teachers) gathered through interviews in Hedge et al. (2014) study.

The underlying thread of, taking into consideration differences in the children's developmental needs when designing learning activities also arose, when the participants in this study elaborated on developmentally appropriate features of "supporting" instructional strategies (e.g. picture-walk and think-pair-share). A central component of these strategies was the use of visuals (e.g. conversational posters) as developmentally appropriate tools for making learning meaningful and relevant to young children in these kindergarten settings.

Since the visual resources, themselves were supplied by the Ministry, and strategies such as picture-walk were mandated in the curriculum, it was difficult to ascertain if these teachers' compliance with the curriculum indicated that they too saw the relevance and value of such interventions. That said, since these teachers perceived such supporting strategies (e.g. think-pair-share and picture-walk) as practices that they might personalise in order to promote and improve their particular children's development, suggesting that these teachers recognised the valuable role surrounding pictures/imagery with productive conversations could have in developmentally appropriate practice.

Interestingly, a substantial body of research literature (Palermo, 1970; Pressley, 1977; Migliorini and Rania, 2017) points to a viable role picture-imagery plays in children's language development. For instance, based on observation of kindergarten children in Italy, Migloorini and Rania (2017) argued that picture imagery aids children's language development because it serves as the basis for initiating a discussion with children which in turn, develops their oral language skills. Of note then is that the current study's observations (and interviews) provide similar evidence from a Ghanaian context, whereby children and teachers (both rural and urban) readily engage in talk about the conversation posters, with children drawing on their previous experiences to form their reflections on and response to the topics. As indicated throughout this discussion, because the centralized kindergarten curriculum in Ghana and these teachers' university education and professional development is heavily infused with DAP (e.g. these teachers are expected to use picture imagery to teach language and literacy), it is challenging to discern when and if the teachers' simply expressed views defer for these authorities. That said, the ease with which these teachers illustrated how developmentally appropriate, such strategies were and how they used the instructional strategies in context-specific ways, suggests that the needs of the child being addressed were somewhat "localized", and not entirely dictated by universal, and/or Westernized definitions associated with DAP.

## Conclusion

Moreover, the teachers are expected to take into account the needs of individual children when planning the kindergarten curriculum. For example, it was evident from the study that children cannot separate their everyday lived experiences in their immediate environments from what they learn in their kindergarten classrooms. Thus, it appears that for instructional strategies to have the desired impact on children's development, the lived experiences of children should be the driving force. Moreover, the study has shown how we understand the nature of children, how they learn and the corresponding teachers' instructional practices that promote effective

teaching and learning in kindergarten classrooms. Future research should explore specific instructional strategies for developing specific multiple intelligences of young children such as socio-emotional or socio-spiritual. However, the study was limited to how instructional strategies are used in early childhood settings to enhance and promote children's development.

## Implications for Teacher Preparation and Professional development

The study demonstrated the potentials that exist for the use of instructional strategies to complement the teachers' attempt to create constructive learning environments in early childhood settings. Particularly, the study established that insights of preservice early childhood teachers into appropriate use of both specific and generic instructional strategies regarding when and how to use each of them within the teaching and learning context has the potential to unearth children's potential by situated the selection of instructional strategies within the context of the uniqueness that individual children bring to the teaching and learning context with respect to interests, needs and potential. This understanding is significant in that more reflective practice can proceed thereafter, to select a particular generic instructional strategy to deal with holistic developmental needs of children. Importantly, the study also identified the strength of specific instructional strategies as alternative strategy that may help to point out the nuances regarding a worthwhile means of obtaining observational evidence to inform the use of appropriate specific instructional strategy to deal with certain developmental needs of individual children that cannot be addressed through a generic instructional strategy.

## CONFLICT OF INTERESTS

The author declares that there is no conflict of interests.

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