

Instructional Decision-Making Processes of Teachers in Kindergarten Classrooms within the Cape Coast Metropolis: A Multi-Case Study

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Abstract

The study contributes to the ongoing debate with respect to the significance of early childhood teachers' instructional decision-making that take into consideration their theoretical knowledge (explicit theories) and practical experiences (implicit theories) and how they impact their instructional decision-making processes in diverse socio-cultural contexts while dealing with children. To address this gap in the literature, a qualitative multi-case study design was used to research into the factors that influence teachers' instructional decision-making in kindergarten classrooms. Four kindergarten teachers were selected from two Ghanaian schools at Tata and Kariba. The study was carried out over a period of six months. Four research questions guided the study, based on four thematic areas, namely: professional factors, teaching experiences, teachers' reflection in action, and teachers' reflection on action. Data for the study were collected from semi-structured individual interviews and pair-based interviews and fieldnotes of classroom observations. Both within and across case interpretative analysis were used. The findings of the study revealed that these teachers' knowledge of explicit theories and implicit theories of teaching influenced their instructional decision-making processes in kindergarten classrooms. It was therefore recommended that future researchers should explore early childhood teachers' explicit and implicit theories of teaching. It was also recommended that kindergarten teachers appreciate their roles as effective instructional decisions makers in providing quality teaching and learning.

Key words: *explicit, implicit, theory, decision-making, instructional, teachers, early childhood, teachers, schools, Ghanaian*

Introduction

Teachers' thinking on how to make informed instructional decisions, has been of interests to researchers in early childhood education over a decade. Studies have been conducted on teachers' reflective practices (Beliner, 1994). These studies, which mostly focus on comparative analysis of pre-service teachers' instructional decision-making processes, have provided valuable insights into the cognitive processes involved in teachers' instructional decision-making processes. The findings of these studies revealed deficiencies that are closely-linked to instructional decision-making processes of pre-service teachers. Recommendations were made on the need to empower the teachers to develop theoretical and practical insights regarding instructional decision-making in diverse kindergarten settings. However, these insights reflected the views of pre-service early childhood teachers, and as a result, there has been the need to explore how kindergarten teachers make their instructional decisions.

Globally, a lot of extensive academic research work has been done to explore early childhood teachers' instructional practices (Hayson, Hirsh-Pasek & Rescorla, 1996; Maxwell, MacWilliam, Hemmeter, Ault & Shuster, 2001; Horn & Ramey, 2004; Hedge & Cassidy, 2009). In Ghana, similar works have been done on early childhood education (Ministry of Education, Science and Sports (2006); Thompson, 2010; Thompson & Asare-Danso, 2016; Asare-Danso & Annobil, 2016; Asare-Danso, 2017). However, not much research work has been done to investigate teachers' instructional decision-making processes in early childhood settings (Beinstein, 1975; Spodek, 1988a; Mitchell, 1994). As teachers continue to make instructional decisions, this has called for the need to extend research work beyond the daily encounters of teachers with children in kindergarten classroom context. This need is illustrated in many ways: For example, children come to every learning contexts with certain uniqueness in terms of interest, learning needs and potentials. Nevertheless, It takes early childhood educators who have theoretical and practical insights into instructional decision-making to make decisions which would in turn, impact individual children's development in diverse ways.

It is increasingly evident that effective instructional decision-making would continue to be a critical component of effective teaching and learning in early childhood settings. The processes leading to an informed instructional decision-making forms a critical component of effective teaching because it gives teachers insights into learning materials, learning activities and instructional strategies that are likely to work during teaching. Instructional decisions prior to the commencement of a lesson provide teachers with opportunities to anticipate factors that are likely to enhance their effectiveness, thereby not subjecting successful instructional delivery to chance. Although, some academic researchers have acknowledged a need for a greater understanding in this area (Bredekamp, 2014), little is known about how kindergarten teachers within the Cape Coast Metropolis make their instructional decisions. It will therefore be of interest to explore to know the instructional decision-making processes of kindergarten teachers within the Cape Coast Metropolis. It is of interest to know that teachers' theoretical knowledge about instructional decision-making is closely linked to the quality of instructional decisions that they make before, during and after every teaching and learning period. Having insights into the connection between teachers' theoretical knowledge about instructional decision-making processes in early childhood settings would broaden our understanding regarding how the needs, interests and uniqueness that children bring to every learning context is factored into their decision-making.

The main purpose of the study is to examine the factors that influence teachers instructional decision-making in kindergarten classrooms within the Cape Coast metropolis. The research questions driving the study are as follows: (i) What professional factors influence teachers' instructional decision-making processes in a kindergarten classroom? (ii) What teaching

experiences influence teachers' instructional decision-making processes in a kindergarten classroom? (iii) Does teachers reflection in action influence teachers' instructional decision-making processes in a kindergarten classroom? and (iv) Does teachers reflection on action influence teachers' instructional decision-making processes in a kindergarten classroom?

Review of Literature

The Implicit and Explicit Theories of Early Childhood Teachers provide the theoretical framework for the study. Many educators believe that the most informed teachers are, the greater the likelihood that the teachers' practices in classrooms can impact positively on children's development. Moreover, teachers' deeper insights into their practices would enable them to make informed instructional decisions regarding pre-lesson preparation, during and after the end of every instructional segment. By implication, teachers' instructional decision-making in early childhood settings appears to be influenced by explicit theories of teaching and implicit theories of teaching. However, Spodek (1988b) maintains that teachers' explicit theories of teaching evolve because teachers tend to process information as they interact with children in class. Through this mechanism, they come to understand certain concepts and values that they have gathered over the years in their practice as teachers. Hence, teachers' actions and instructional decisions are usually influenced by their perceptions and beliefs. These factors tend to influence their views about their practices as teachers. These impressions held by teachers stem from their beliefs, ideas or theories they hold implicitly. As Spodek (1988b) suggests, these interpretations eventually become the foundation for teachers' practices in early childhood classrooms. Spodek (1988b) further argues that for a better understanding of the role of teachers, there is the need to understand the implicit theories that constitute their guiding principles, while taking instructional decisions. Spodek (1988b) therefore, asserts that implicit theory refers to instructional ideas that teachers develop from personal experience based on practical experiences over a period. Spodek (1988b) further maintains that for a long time, most early childhood educators conceived of teaching in early childhood settings as a practical application of the scientific field of how young children develop.

A number of studies have been conducted in the past to explore teachers' implicit theories in classroom settings. For example, Bernstein (1975) explored ideologies influencing early childhood programmes in England and concluded that there was a hidden pedagogy or implicit theories of teaching that influenced teacher practices in infant schools that serve children from age five to seven. Mitchell, (1994) in a study which investigated teachers' implicit theories concerning how teachers ask questions in class during teaching concluded that most teachers believe that to ensure an effective setting for questioning, students should be comfortable with both the teacher and their peers. The implication is that effective questioning tends to be influenced by the learning environment that teachers create in classrooms. However, Spodek (1988b) in a study which explored the implicit theories of early childhood teachers revealed that there is more to teaching than just having firm grasps of the principles of teaching. In other words, there is more to teaching than just what is visible about the activities of teachers in their classrooms. The study's findings further revealed that in moments of solitude teachers might be still function as teachers because they might be contemplating on an earlier topic taught in class or a topic they are planning to teach in class. While teaching, teachers are able to predict what is likely to take place before, during and after every teaching process. Thus, there is the need for more research into how explicit and implicit theories of teaching impact teachers' instructional decision-making in kindergarten classrooms.

Method

Research Design

This study was designed as a qualitative multiple case study (Stake, 2006) because we wanted to establish the differences regarding teachers' practices in two schools, which were sited in different socio-economic settings within the Cape Coast metropolis. Creswell (2003) described a qualitative study as one that takes place in the natural setting and the researcher goes to the site to conduct the research to enable him or her to get detailed information about the problem. We fulfilled that by going to the two schools where the participants taught, to conduct the research.

Participants

We selected two schools within the Cape Coast metropolis in Ghana for the study. For the purpose of anonymity, the two schools were given the pseudonyms as Tata School and Kariba School. Four (4) participants who were kindergarten teachers were selected for the study. They were also given pseudonyms as Kate and Sophia from Tata School, and Ramatu and Akotia from Kariba School. The participants were purposively sampled from two kindergarten classrooms sited in different socio-economic contexts within the Cape Coast Metropolis in Ghana. Kate had taught for 25 years while Sophia had taught for 19 years. Ramatu had taught for 9 years, while Akotia had taught for 7 years. While both Kate and Sophia had Bachelors' Degrees in Early Childhood Education, Ramatu and Akotia on the other hand, had Diploma in Early Childhood Education qualification.

Instruments

Two main instruments were used for this study. These included semi-structured interviews and observations. The interviews made it possible for the researchers 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 with the researchers as well. Other reasons for interviewing the participants several times included the following; first, it enabled us 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.

Procedure

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, observations took place in all the two kindergarten classrooms. The observations provided an opportunity for us to determine how teachers level of knowledge about their practices unfolded in real-life classroom context. During our observations, on one occasion, and in an unobtrusive manner, we conversed with the kindergarten teachers while the children were engaged in small group activities or individual activities, in order to seek clarifications from them about their reasons for engaging children in various kinds of activities. After, the end of classroom instructional decision-making. In every lesson, we engaged them in a discussion for about ten minutes to seek further clarifications on issues relating to the teachers' instructional decision-making. This process of interacting with the teachers provided each one of them an opportunity to clarify an issue arising that was perplexing to us, while observing the teachers' instructional practices in the classrooms. During their engagement in these 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 us to observe and interact with the teachers two or three times during the study. Because our focus in this study was to explore teachers' perspectives about their practices in the classrooms, one of the researchers used field notes, while the other researcher did audio recording of conversations with the teachers simultaneously, in order to validate the data collected. Such observations allowed us to examine issues beyond self-reporting, because how teachers describe their actions and how their actions unfold in real-life teaching and learning within the classroom context may differ. The observations of the teachers were done after each of the teachers had been interviewed. Apart from being a technique for generating primary data, observations served as a check on the other data collection method. This method was used to check individual biases that were likely to be exhibited in the in-depth interviews. Also, the gathering of data using two research instruments allowed for triangulation of data.

The instruments were administered to the participants in the two case schools from May 2015 to November 2015. The data analyses were done on case by case basis to identify key themes within each of the cases to answer the research questions. The teachers' thoughts which were audio recorded were 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).

Research Findings

(i) Case Study Analyses of the Teachers at the Southern School (Tata)

Thematic data analysis was done, using the four themes that were used to develop the research questions. The findings of the study were reported based on 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 as follows:

Instructional Decision-Making Processes

The results of the study revealed that, the two teachers made instructional decisions before, during and after every lesson. In addition, the teachers' instructional decision-making processes appeared to have been influenced by professional factors (instructional strategies suggested in the curriculum, their professional education), the teachers' experiences, the teachers' reflection in action, and the teachers' reflection on action (Pedretti, 1996).

Professional Factors

While both Kate and Sophia valued instructional strategies suggested in the kindergarten curriculum and used them to inform their instructional decision-making process, both teachers further perceived their professional education as a basis for their instructional decision-making processes. The reader is reminded that Kate and Sophia completed a 4-year degree (B. Ed) in Early Childhood Education. Nonetheless, the two teachers saw the impact of professional factors on their decision-making in similar ways.

Kate: My professional training has broadened my knowledge about how [children learn] because it has helped me to know the various stages of children's development, and how to handle them at every stage. It has also helped me to know the behaviour pattern of children and what to do.

Sophia: My professional training helps me to take the age and the needs of the individual children into consideration when selecting learning materials because early childhood education has made me understand how children learn.

While both teachers felt that their professional education helped them to understand how children learn, Kate appreciated how her knowledge about children's stages of development helped her know how to respond to children's behaviour in class, whereas Sophia felt such knowledge permitted her to attend to learning needs of her children. Thus, the teachers' professional education backgrounds gave them different insights into how to make well-informed instructional decisions.

Moreover, Kate and Sophia further provided other reasons for how their professional education impacted their instructional decision-making.

Kate: This knowledge that I have about children helps me to select instructional strategies which are suitable for young children. Also, it has helped me to understand that children learn through hands-on experiences, so when I am teaching, I provide the needed learning materials for the children to interact with.

Sophia: Knowing the developmental stages of children help me to select topics and teaching strategies that are useful to the children.

For Kate, her knowledge about how children learn helped her to make effective instructional decisions by selecting appropriate learning materials and instructional strategies for her lessons. Sophia, on the other hand, said that her knowledge about children's level of development helped her to select topics and methods that were appropriate for children in her class.

Teaching Experiences

Both Kate and Sophia saw their instructional decision-making processes in a kindergarten classroom as a function of their previous teaching experiences (Kate: 25 years teaching K; Sophia: 19 years teaching K). However, there were similarities and differences regarding how both teachers perceived its impact.

Kate: My teaching experiences help me revisit my teaching. It helps me re-adjust my teaching by repeating some of the activities and methods to develop children's fine motor skills before I move further to the next topic

Sophia: My experiences in early childhood classrooms always guided me to select learning activities and methods of teaching, which were useful for the development of young children.

Thus, for Kate, her experiences (both with these children and those she taught in previous years) gave her clues as to whether the teaching methods and activities she was using were effective or not. However, she modified them whenever there was the need to do so; while for Sophia, her experiences served as a clue for selecting effective activities and instructional strategies during pre-lesson preparation.

Teachers' Reflection in Action

Both Kate and Sophia also valued reflection in action (a means of making instructional decisions during teaching) as a means of instructional decision-making in their kindergarten classroom. However, they spoke of it somewhat differently.

Kate: If I am using a method which is making it difficult for the children to understand what I am teaching? I do change the method in the process of teaching.

Sophia: If the strategy I am using is effective, you will see the children contributing to the discussion. But if it is not, their attention would be diverted from what we are doing in class.

Kate was of the view that she used children's lack of understanding of concepts during teaching as a cue for modifying her instructional strategies. Sophia, however, was of the view that the inattentiveness of children in the class was a signal that the instructional strategy she was using was not effective.

Teachers' Reflection on Action

Both Kate and Sophia valued reflection on action (a means of making instructional decisions after teaching) as an effective means of instructional decision making in kindergarten settings. However, the teachers described different feedback, written or oral, as cues for their reflections.

Kate: After I have taught a lesson, I sit down to think about what I did in class. For example, we have some workbooks so after the activities when I mark their work, and they did not do well I reflect to see whether it was because of the method that they did not get the information right or not. So, when I come to class next time I revisit the topic.

Sophia: After a lesson, I reflect on whatever I taught in class. It helps me to know whether what I did was right or wrong. If I found out that they did not understand the lesson because they [could not answer the questions] that I asked them, I will ask myself whether I should teach the lesson again or part of it.

Both Kate and Sophia said that they assessed the effectiveness of a lesson that they had delivered in a class by reflecting on it. While Kate told us that the low scores of children in a class exercise suggested that the instructional strategy used during the lesson might not have been effective, Sophia, nonetheless, used the inability of children to respond to questions in class as a signal that the lesson was not well delivered.

In sum, evidence from the data appears to suggest that the instructional decision-making processes of these teachers in this study were directly and indirectly informed by their pedagogical training, experiences and reflective practices. Nonetheless, there were similarities and differences regarding how these factors impacted their instructional decision-making processes.

(ii) 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's interview responses produced several themes which addressed each of the four research questions.

Instructional Decision-Making Processes

As regards the four research questions, the analyses of the teachers' interviews transcripts indicated that these two teachers made instructional decisions before, during and after every lesson. Indeed, professional factors (instructional strategies suggested in the curriculum, teachers' professional education), the teachers' experiences, the teachers' reflection in action, and the teachers' reflection on action appeared to have informed the teachers' instructional decision-making processes.

Professional Factors

Both Ramatu and Akotia valued instructional strategies suggested in the mandated curriculum and used it to inform their instructional decision-making process not only because doing so was useful in planning their curriculum, but also because they also felt comfortable using the strategies. However, both teachers indicated that they modified the instructional strategies suggested in the kindergarten curriculum whenever there was the need to do so.

Ramatu: But the strategies are suggestions because when they are researching into them, they use a different environment so the strategy might not be useful in our situation. So, I use a different strategy if the one suggested in the syllabus is not working.

Akotia: Some of the teaching strategies outlined in the curriculum such as think-pair-share is good for language and literacy lessons in schools where children are allowed to express themselves freely. So, they are not timid. But the children in this school are coming from homes where parents take all decisions. So, when they come to school, and I [use] such a strategy, the children would not even contribute. So, as a class teacher, I know the children in my class better than any other person. So, I will not go in for such a strategy but will look for a strategy that will be effective in our case.

Both Ramatu and Akotia perceived that the socio-cultural contexts which informed the design and development of the instructional strategies might not align with the socio-cultural contexts of the children they teach. So they modified the strategies to suit their contexts when they considered it necessary to do so.

In a similar vein, both Ramatu and Akotia perceived that their professional education (3-year Diploma in Early Childhood Education) impacted their instructional decision-making process. Nonetheless, there were similarities and differences inherent in how they perceived it.

Ramatu: I did Early Childhood Education, so it has helped me to understand how children learn, and what I am expected to do in class to enhance their learning.

Akotia: I know how children learn, so this knowledge that I have about children help me to select learning materials and methods of teaching that are suitable for young children.

For both Ramatu and Akotia, their insights about children, gained through their education programmes, enabled them to understand how children learn. Akotia further elaborated how she used her insights about children to promote their development. Nevertheless, Ramatu connects 'how children learn' to specifics like the selection of learning materials and teaching methods.

Indeed, Ramatu further explained how her insights into how children learn and how she was expected to relate to the children in class impacted her instructional decision-making in her kindergarten setting. She elaborated:

Ramatu: In this class, I engage the children in a lot of hands-on activities. But as a means of encouraging them to learn, I always make sure that they see me as one of them because when I come to their level, they will feel at home and this will enhance their learning. So, in class, I behave like them, sing like them and dances like them.

For Ramatu, teaching and learning in kindergarten classrooms was more effective if a kindergarten teacher created a learning environment which recognised children as partners in the teaching and learning process.

Teaching Experiences

Both Ramatu and Akotia perceived that their teaching experiences impacted positively on their instructional decision-making processes (i.e. Ramatu, 9yrs teaching K; Akotia, 7yrs teaching K). Both teachers had a similar perception of its impact.

Ramatu: The experiences that I have had in teaching young children help me to choose the right learning materials for the children. Children would only understand a concept if the learning materials I am using is familiar to them. So, as I interact with them, I get to know the materials to choose for them.

Akotia: [My experiences] help me select learning materials which are familiar to the kids because they can easily relate to those materials. If I am teaching about fruits and cite grapes as an example, the children will not understand because it is not familiar to them. But if I use mangoes as examples, the children will understand because they have eaten it before, so it is familiar to them.

For both Ramatu and Akotia, their previous teaching experiences (both with these children and others in previous years) informed them that learning materials which are familiar to children tended to promote effective learning in class, and this in turn, influenced their selection of learning materials in subsequent lessons.

Teachers' Reflection in Action

Both Ramatu and Akotia pointed to reflection in action (a means of making instructional decisions during teaching) as a means of instructional decision-making in a kindergarten setting.

Ramatu: When I am teaching, I get feedback from the children. The feedback I get from the children will tell me whether the instructional strategy I am using is working or not. If it is not working, there is the need for me to use a different strategy. But as a teacher, I know that it is not helpful for me to rely on only one teaching strategy. So, during pre-lesson planning, I consider two or more other strategies so that if the one I am using is not working, I can go in for a different one.

Akotia: As I teach, I evaluate the lesson to see whether they are getting what I am teaching. For example, I might ask one or two questions as I am teaching to find out if they are getting what I am teaching. This process would help me determine whether the strategy I am using is helping them or not.

Thus, both Ramatu and Akotia used cues from the children to assess their level of understanding of the concepts taught in class. While Ramatu speaks of feedback from children, she did not explicitly reveal the nature of the feedback and whether or not it was related to children's understanding. However, Akotia specifies that she assessed the children's understanding (by asking questions) and implied that the lack of correct answers signalled that her instructional strategy was not working. These teachers, therefore, perceived that it was their actions and decisions, that impacted children's learning. As such, it would seem that Ramatu and Akotia did not subscribe to the deficit model of the child.

Teachers' Reflection on Action

Also, Ramatu and Akotia spoke of reflection on action (a means of making instructional decisions after teaching) as another means of instructional decision-making.

Ramatu: After I have taught a lesson, I reflect to see if I did the right thing. When I realised that the lesson was not well, taught I look for information from different textbooks to help me teach the lesson again. For example, if I did not say something I should have said, I make sure that I teach the lesson again.

Akotia: Anytime I finish teaching a lesson; I sit down to think about it to see if there was something I did not do right. If I realise that there was something I needed to do during the lesson, but I did not do, I prepare for the following week and teach the lesson again.

Both Ramatu and Akotia acknowledged that they always assessed the effectiveness of every lesson they delivered in a class by pondering over whether it was successful or not. Interestingly, both speak of right and wrong and seem to relate it to "missing information." Moreover, both teachers use a remedial lesson to rectify the situation. While Ramatu was explicit about how she prepared for the remedial lesson, Akotia was not.

Overall, then, evidence from the data appear to suggests that the instructional decision-making processes of the participants in this study were informed by their professional education backgrounds, their experiences and reflective practices. However, there were similarities and differences regarding how these factors impacted their decision-making.

(iii) Across Case Analyses: Teachers' Instructional Decision-Making Processes at Tata and Kariba Schools

To further understand the ways in which kindergarten teachers make instructional decisions, across-case analyses (by school) is reported next. As might be expected, some of the themes reported within each case were unique to that case. With regard to kindergarten teachers' perceptions about their instructional decision-making processes, across-case analyses (by school) indicates that all the themes reported in each case were common to all four teachers across the cases, irrespective of the school setting in which they taught.

Across the cases, the participant's valued professional factors (strategies suggested in the curriculum and professional education) in their instructional decision-making in kindergarten

settings. Irrespective of context, all four teachers used the strategies suggested in the curriculum in their decision-making. Moreover, the role of socio-cultural contexts were apparent in both cases. In Tata School and Kariba School, it was Kate and Sophia at Tata School and Akotia from Kariba School who linked it to the selection of teaching methods. While those teachers at Tata School reported that it served as the basis for selecting instructional strategies, the teachers at Kariba School, on the other hand, perceived its impact differently. While Ramatu linked it to the selection of learning materials, Akotia, however, saw it as means of creating learning environments that see the teacher and the children as partners in the teaching and learning process.

Across cases, teachers believed their previous, and current teaching experiences impacted their instructional decision-making in their kindergarten classrooms. However, at Tata School in an urban setting, the teachers' spoke of its impact on the selection of teaching methods while Sophia further linked it to the selection of learning activities. In Kariba School, such experiences informed the teachers' selection of learning materials. Thus, in both cases, the teachers perceived its impact on their decision-making differently.

Across cases, the participants valued reflection in action as one of the means of instructional decision-making in kindergarten classrooms. Regardless of context, the four teachers used it to assess the impact of their practices on children's learning. While Kate from Tata School and Ramatu from Kariba School, spoke of modifying their practices based on such reflection, this was not overly discussed by Sophia and Akotia from Kariba School.

Likewise, reflection on action as one of the effective means of instructional decision-making processes was apparent in kindergarten classrooms across cases. Irrespective, of the school setting, the teachers used such reflections. While all four teachers spoke of determining the effectiveness of their practice by such reflection, it was only Kate at Tata School who reported the low scores of children in class assignments as a determinant of an ineffective lesson.

In summary, then, comparisons of the emergent themes across the two cases, and thus across all 4 Kindergarten teachers indicate only minor differences, based on the rural and urban contexts in which these classrooms were located. Likewise, no distinct patterns could be seen with regard to years of experience or level of education. However, the findings do point to nuanced reasoning and beliefs about developmentally appropriate practices associated with individual teacher's perspectives. Thus, while there were many commonalities among the kindergarten teachers, the ways in which each teacher illustrated and articulated her perceptions pointed to subtle discrepancies that are worthy of further investigation.

Discussion

As the findings of the current study revealed, these four kindergarten teachers believed that instructional decision-making was based on diverse factors, including reflective practice. While there were differences and similarities regarding how these informed their practice, theories of teaching were a common thread. Interestingly, these teachers' comments pointed towards both explicit theories (professional factors; instructional strategies suggested in the curriculum, teacher education backgrounds) and implicit theories (teachers' experiences, reflection in action and reflection on action) of teaching, guiding their decisions, before and during lessons.

As elaborated by all participants, effective instructional decision-making before the commencement of a lesson in their kindergarten classrooms was closely linked to explicit theories of teaching. This suggested that teachers' ability to make a well-informed instructional decision before the start of a lesson is dependent to some extent on instructional strategies outlined in the kindergarten curriculum. This is not surprising because Ghana practices a centralised and controlled

curriculum, whereby these teachers were expected to make their instructional decisions within the bounds of the frame of the curriculum. Teachers' professional backgrounds are implicated in instructional decision-making before the commencement of a lesson, to the extent that it provided theoretical knowledge, understanding and insights into the usefulness of strategies they would find in the curriculum documents. For example, the kindergarten curriculum in Ghana outlines the content, learning activities, lesson objectives and assessment procedures that are significant for the evaluation of a lesson (Asare-Danso, 2017). In this vein, the professional background of the teacher to some extent plays a significant role in the implementation of the curriculum for instructional decision-making. However, as these kindergarten teachers attest, teaching experience also contributes to their implementation of the curriculum, especially, regarding the selection of instructional strategies, which have proven effective and have aligned with the children's socio-cultural contexts and that of children they have taught in previous years. Thus, while research informed the design of the kindergarten curriculum, it is challenging for such a curriculum to take into consideration, the differences regarding children's specific social contexts. For instance, as revealed in the current, study, teachers' critical analyses of the prescribed curriculum when determining which instructional strategy to choose might reveal its ineffectiveness in a particular kindergarten setting, thereby resulting in the teachers' use of an alternative one. Thus, drawing on personal repertoires of knowledge and experiences, these kindergarten teachers tended to interpret curriculum materials to both inform and support effective teaching and learning in kindergarten classrooms. As such, these participants, even in a centralised education context (i.e. a top-down curriculum model), did not perceive the curriculum materials as cast in stone, but rather as something they could modify when there is the need to do so. In this vein, explicit theories, namely those that were explicated from outside sources such as their professional training, the mandated curriculum and their years of experience, guided them to contextualise such prescriptions in developmentally appropriate ways. What remains unknown is the weight individuals might afford one or another of these in circumstances where the theories were not aligned.

Also, these four participants indicated that implicit theories of teaching were instrumental to effective teaching and learning in these kindergarten classrooms. Accordingly, during and after instruction, these kindergarten teachers used certain cues as a means of addressing some impediments that they believed were mitigating against effective delivery of their lessons. For example, cues such as children's lack of attentiveness in class and low scores in classroom assignments were indicators of the ineffectiveness of their lessons, even when they were peculiar to a few individual children and not the entire class. Thus, these teachers used such cues in reciprocal ways by assessing children's level of understanding and taking the needed remedial when necessary, which in turn, implicitly enhanced and promoted individual children's understanding of concepts taught in class. This points to the significance of these teachers' reflective practices in making informed instructional decisions while teaching (and afterwards). It would appear then these Ghanaian teachers' practices align well with the premise that in early childhood settings individualised teaching should be emphasised because children's abilities differ (Copple, & Bredekamp, 2009; Bredekamp, 2014). Indeed, these teachers' descriptions of effective instructional decision-making during and after their lessons coincide with views that a kindergarten teacher is expected to function in multiple ways, by assessing grounds of failure and taking remedial measures to deal with the situation at hand and in subsequent lessons (Spodek, 1988b; Mathew, 2012). Indeed, the current study's emerging evidence of these teachers' reflection-on-action and reflection in-action point to some role early childhood teachers' implicit theories of teaching (i.e. garnered through experience and reflection) play in their instructional decision-making processes.

Conclusion

It is also apparent from the study that two major factors appear to inform the instructional decision-making processes of the teachers, and these included teachers' explicit theories of teaching and their implicit theories of teaching. It is therefore, suggested that future research should explore early childhood teachers' implicit and explicit theories of teaching.

Implications for Teacher Preparation and In-Service Professional Development

The study demonstrated the potentials that exist for the use of explicit and implicit theories of teaching in early childhood settings to inform teachers' reflective practices in terms of instructional decision-making processes. Particularly, the study demonstrated that both the implicit and explicit theories are useful tools for teacher preparation and in-service professional development of teachers. Teachers' explicit theory allows them to develop deeper understanding of their children's socio-cultural context, interests, potential and uniqueness, which in turn serve as basis for making well-informed instructional decisions prior to the commencement of a lesson. This understanding is significant, in that more reflective practices can proceed thereafter, to enhance and promote children's development. Importantly, the study also identified the strengths of implicit theories of teaching as an alternative reflective practice that may help to point out the nuances within the teaching and learning process to provide a worthwhile means of obtaining observational evidence to promote effective teaching and learning.

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