



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

**A PROFESSIONAL DEVELOPMENT PROGRAMME FOR GHANAIAN
KINDERGARTEN TEACHERS TO IMPLEMENT AN INDIGENOUS PLAY-BASED
PEDAGOGY**

by

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Dedication

I dedicate this work to

My husband Dzifa,

for your Christ-like love

and to my children, Enam, Eyram and Elorm

for experiencing this journey with me!

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Abbreviations and Acronyms

BE	Basic Education
CAPS	Curriculum Assessment Policy Statement for Foundation Phase Gr R-3
CBI	Cluster-Based INSET
CoE	College of Education
CRDD	Curriculum Research and Development Division
DBI	District-Based INSET
ECE	Early Childhood Education
ECD	Early Childhood Development
ECTPDP	Early Childhood Teacher Professional Development Programme
GES	Ghana Education Service
INSET	In-service Training
IP	Indigenous Play
IPA	International Play Association
IPBP	Indigenous Play-based Pedagogy
IPBPDP	Indigenous Play-based Professional Development Programme
JHS	Junior High School
KG	Kindergarten
OPSQKEG	Operational Plan to Scale up Quality Kindergarten Education in Ghana
PDPs	Professional Development Programmes
SBI	School-Based INSET
SHS	Senior High School
TPD	Teacher Professional Development
UNCRC	United Nations Convention on the Right of the Child
UTDBE	Untrained Teachers Diploma in Basic Education

Addenda (Provided on CD)

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Ethical clearance certificate



UNIVERSITEIT VAN PRETORIA
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Faculty of Education

RESEARCH ETHICS COMMITTEE

CLEARANCE CERTIFICATE	CLEARANCE NUMBER: EC 16/11/02
DEGREE AND PROJECT	PhD A professional development programme for Ghanaian kindergarten teachers to implement an indigenous play-based pedagogy
INVESTIGATOR	Ms Felicia Agbagbla
DEPARTMENT	Early Childhood Education
APPROVAL TO COMMENCE STUDY	26 January 2017
DATE OF CLEARANCE CERTIFICATE	30 July 2018

CHAIRPERSON OF ETHICS COMMITTEE: Prof Liesel Ebersöhn

A handwritten signature in black ink, appearing to read 'Bronwynne Swarts'.

CC Ms Bronwynne Swarts
Dr Judy van Heerden

This Ethics Clearance Certificate should be read in conjunction with the Integrated Declaration Form (D08) which specifies details regarding:

- Compliance with approved research protocol,
- No significant changes,
- Informed consent/assent,
- Adverse experience or undue risk,
- Registered title, and
- Data storage requirements.

Abstract

The focus of this study was on the development and implementation of a professional development programme to equip kindergarten teachers with relevant competencies that could enable them to implement the kindergarten curriculum effectively through an indigenous play-based pedagogy. In Ghana, the introduction of the 2004 play-based kindergarten curriculum required teachers to adapt their teaching and children's learning in order to ensure a successful implementation of the curriculum. However, a 2012 report on the operational plan to scale up kindergarten education in Ghana revealed that kindergarten teachers were struggling to implement the curriculum. They were found to be employing the traditional teacher-centred approaches, with the focus on numbers and shapes. These approaches were neither child-centred nor activity-based, which resulted in low-quality kindergarten teaching and learning.

The present study firstly sought to answer the research question how Ghanaian indigenous Anansi stories and games could be employed to develop an indigenous play-based professional development programme that would provide opportunities for enhancing teachers' knowledge of, skills in and attitudes towards implementing a play curriculum. Secondly, the study examined whether the indigenous play-based pedagogy ultimately improves the learning and development of kindergarten children in different kindergarten settings. A qualitative research approach was used involving the socio-constructionist methodology with a participatory action research design within an interpretive paradigm to investigate the indigenous play-based pedagogical practices of eight (8) purposively selected kindergarten teachers. The qualitative research approach was used because it provided in-depth understanding and rich descriptions of the views, experiences and practices of the kindergarten teachers as they engaged with their classroom practices. Data was obtained from different sources, which included visual and written narratives, observation and individual semi-structured interviews over a period of three months for the purpose of triangulation. The data was thematically analysed and the results were categorised into themes and sub-themes. The overarching findings showed that analysis and application of the Anansi stories in the implementation of the indigenous play-based professional development programme enhanced teachers'

knowledge of, skills in and attitudes towards the implementation of the kindergarten curriculum.

Key Concepts

Anansi stories, early childhood education, indigenous play, indigenous play-based pedagogy, indigenous play-based professional development programme, kindergarten education, kindergarten curriculum, kindergarten teacher, professional development programmes.

Certificate of language editing

DECLARATION OF EDITING

This is to certify that during July 2018 I performed a language edit on

A professional development programme for Ghanaian kindergarten teachers to implement an indigenous play-based pedagogy

by Felicia Agblagba



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CHAPTER 1

OVERVIEW AND RATIONALE

1.1 PURPOSE OF THE STUDY

The purpose of this study was to develop an indigenous play-based professional development programme (IPBPDP) that culminates in competencies (knowledge, skills and attitudes) needed by kindergarten (KG) teachers (teachers working with children age 4-5 years) to implement the kindergarten curriculum in Ghana effectively through an indigenous play-based pedagogy. The views and practices of the kindergarten teachers provide insight into the influence of the development and implementation of the IPBPDP on the teachers and the learners within the KG context.

The specific objectives of this study therefore were to:

- Explore Ghanaian kindergarten teachers' knowledge, attitudes and beliefs regarding the implementation of a play-based curriculum and how these affect their practices within the kindergarten context;
- Examine how the design and implementation of an indigenous play-based professional development programme influences teachers' knowledge, attitudes and practice in relation to the implementation of the indigenous play-based pedagogy;
- Identify and examine any factors responsible for changes in teachers' practice following the implementation of the programme.

1.2 PROBLEM STATEMENT

The problem of the current study was to determine whether an indigenous play-based professional development programme would enhance kindergarten teachers' knowledge, beliefs, attitudes and practice of the KG curriculum delivery, and to determine any influence of the implementation of the IPBPDP on the learners and the teachers.

1.3 RATIONALE FOR THE STUDY

Despite the growing evidence that teacher professional development programmes have the potential to advance the quality of early childhood education, not much has been said about how to achieve this end in Ghana (Schachter, 2015; Tamanja, 2016). The Pre-Tertiary Teacher Professional Development and Management in Ghana policy framework of the Ministry of Education (hereafter referred to as the PTPDM policy framework) adopts a three-level model of teacher professional development (Ministry of Education, 2012a) consisting of district-based in-service training (DBI), cluster-based in-service training (CBI) and school-based in-service training (SBI). The DBI is designed to equip head teachers (school principals) with relevant leadership and management skills. It also targets curriculum leaders of the schools by providing training that enhances their knowledge of subject matter and pedagogical contents. The PTPDM policy framework mandates head teachers and curriculum leaders to collaborate with teachers to plan and implement SBI for the teachers, but also demands that the SBI be organised at cluster levels, where other schools are included to promote sharing of knowledge, skills and expertise among the participating school (Ministry of Education, 2012a).

A critical examination of the PTPDM policy framework revealed that, among other things, SBI aims to enhance and strengthen teachers' capabilities in areas such as the promotion of "child-centred" methods of learning and "curriculum development and improvement," and teachers are afforded the chance to discuss and review the contents of school curriculum and develop effective strategies for delivering it (Ministry of Education, 2012a:27).

According to the literature, teachers prefer SBI to CBI in spite of the advantage of "networking" associated with CBI (Starkey, Yates, Meyer, Hall, Taylor, Stevens & Toia, 2009:184). According to Starkey *et al.* (2009:184), SBI is tailored to the pedagogical and professional needs of teachers, which helps them change their practice. In short, the PTPDM policy framework does not appear to promote the SBI model of professional development. There is therefore a need for the introduction of a professional development programme designed around the needs of teachers and informed by the indigenous knowledge of the teachers. This will help the teachers

to improve their kindergarten curriculum delivery and ultimately change the manner Ghanaian kindergarten children are educated.

The call for a change in the education of the young child in Africa, and Ghana in this case, cannot be overemphasised (Agbenyega, 2018; Pence & Shafer, 2006). Agbenyega notes that the present pedagogical practices of early childhood teachers in Ghana limit children's cognitive development, thereby hampering their effective functioning as social, economic and political members of the community. Pence and Shafer (2006) call for the contextualisation of early childhood pedagogy by employing a pedagogy that takes into consideration the social and cultural contexts within which learning and teaching occur (Bennette, Wood & Rogers, 1997). Abdulai (2016) agrees and supports the inclusion of IPBP into the KG curriculum for the purposes of teaching and learning in the KG context. Abdulai believes that making the IPBP part of the KG curriculum and training the teachers on its implementation will give teachers the opportunity to understand how to use this pedagogy at the KG level.

Although IPBP is considered important for kindergarten teaching and learning, not many studies have focused on it in Ghana. It is worth noting that whereas Western play-based pedagogies have been studied extensively, little is known about Ghanaian kindergarten teachers' knowledge, attitudes and beliefs regarding the implementation of the IPBP at kindergarten level. Researchers from Australia, Canada, South Africa and Ghana have indicated a need for research of teachers' implementation of the IPBP at kindergarten level (Abdulai, 2016; Agbenyega, Tamakloe & Klibthong, 2017; Pence & Shafer, 2006).

The present study is significant because it focuses on the training of kindergarten teachers to enable them to implement an indigenous play-based pedagogy in the KG environment. The study also explores how the teachers implemented the IPBP in different KG settings in order to facilitate conceptual development of the KG learners.

A review of both local and international literature showed that it is difficult for teachers to implement play-based pedagogy in the classroom context (Abudulai, 2016; Hyvonen, 2011; Ministry of Education, 2012b; Rogers 2011). Scholars have

identified a number of reasons for this situation (Abdulai, 2016; Hakkarainen, Bredikyte, Jakkula & Munter, 2013; Rogers, 2011; Wood, 2009). Most of the scholars (Abdulai, 2016; Hakkarainen *et al.*, 2013; Wood, 2009) attribute teachers' inability to implement a play-based pedagogy to the lack of training of the teachers. However, hardly any research has been done in the Ghanaian context regarding kindergarten teachers' implementation of the IPBP. Hence there is a gap in the voice of the Ghanaian teachers at the kindergarten level. This study addresses some aspects of the gap and hopes to remedy the shortcomings in kindergarten teachers' implementation of the IPBP within the Ghanaian context.

It is commonly assumed that teachers acquire the necessary competencies for implementing a play-based pedagogy during their pre-service training. However, Abdulai (2016) and Hakkarainen *et al.* (2013), assert that this is not always true. The authors therefore, recommend that teachers should be trained through a professional development programme to enable them to acquire the needed competencies to implement a play-based pedagogy.

1.4 BACKGROUND AND CONTEXT OF THE STUDY

Ghana, like other countries, has gone through several educational transitions in recent years. One such change was the incorporation of kindergarten education into the formal basic school system in 2007. Until then, KG in Ghana was not considered part of the formal basic school system.

The 2004 KG curriculum, developed for educating four- and five-year-olds, focuses on six learning areas (environmental studies, creative activities, numeracy, music, dance and drama, physical development and language and literacy) with emphasis on play-based, child-centred and activity-based teaching and learning. Psychosocial skills, which is a seventh learning area, is to be integrated into all learning areas and is not considered a separate learning area. The KG curriculum requires that children be taught through play, which requires teachers to possess a range of pedagogical competencies for effective implementation (Curriculum Research and Development Division (CRDD), 2004).

To this end, various early childhood teacher education programmes were established to prepare kindergarten teachers with the skills, knowledge and to

develop attitudes needed for their task (Associates for Change, 2016). Put differently, KG teachers should have developed competencies needed to effectively implement the curriculum (Hakkarainen *et al.*, 2013; Ministry of Education, 2012b). However, in Ghana, according to Agbenyega and Klibthong (2011) as well as Buabeng-Adoh (2012), pre-service teacher education does not seem to prepare teachers adequately to plan and implement curriculum content as expected. This is probably because the teachers were not adequately exposed to the KG curriculum contents during their pre-service training (Associates for Change, 2016).

After more than six years of implementation of the KG curriculum, the government instituted an Operational Plan to Scale-up Quality Kindergarten Education in Ghana (hereafter known as OPSQKEG). To this end, a nation-wide review of the whole KG education situation was carried out in 2012 to improve the quality of kindergarten education in Ghana. Findings from the review revealed that KG teachers were performing poorly in implementing play-based pedagogy as stipulated in the curriculum. Teachers' pedagogical practices indicate a lack of understanding how children should learn and how teachers should teach according to the requirements of a play-based curriculum. It was noted that KG curriculum implementation was mostly based on rote learning methods involving letters and numbers. This pedagogical approach, OPSQKEG notes, is neither child-centred nor activity-based (Ministry of Education, 2012b). To properly contextualise the study, it is important to give a brief description of the Ghanaian KG curriculum and an explanation of the training programmes these teachers graduated with.

1.4.1 Curriculum for kindergarten (1-2)

1.4.1.1 Rationale and philosophical underpinning

In this study, the curriculum for kindergarten 1-2 (hereafter refer to as the KG curriculum) refers to the totality of the body of contents and lessons that the four- and five-year-olds (kindergarten 1 and kindergarten 2 respectively) are exposed to during their kindergarten education in order to prepare them for formal school routines. The rationale that underpins the design of the KG curriculum is that teachers must identify the informal experiences that children bring to the KG and create conducive conditions for their development and expansion. Though the curriculum does not explicitly mention its underpinning philosophy and/or theories,

it operates on the principle that “children learn by doing.” Hence, teachers are required to provide learning opportunities that involve children’s participation and active engagement (CRDD, 2004: II).

The KG curriculum encourages teachers to expose learners to a variety of challenging situations that will require learners to use all their senses to find answers to their curious minds. To this end, teachers are encouraged to help learners develop “attitude and process skills” such as experimenting, observation, manipulation, communication, curiosity, perseverance, self-confidence and assertiveness (CRDD, 2004: IV).

1.4.1.2 Organization

The KG curriculum is organised in a manner to ensure that the learner remains the focal point for all learning activities. Learning experiences that are presented to learners through the application of “prescribed child-centred approaches” are to ensure that children enjoy their KG learning experiences. The curriculum is structured into five columns: unit/topic, specific objects, content, teaching/learning and evaluation. The content of each of the columns is described below (CRDD, 2004: II).

- **Column 1: Unit/topics**

This includes the body of knowledge and skills (topics) to be taught and learned. Although the topics have been arranged in order of difficulty, the teacher is not compelled to stick to this arrangement; if the teacher thinks teaching a topic before another will enhance children’s understanding, the teacher may do that.

- **Column 2: Specific objectives**

This column shows the specific objectives for each topic – what a child should be able to do or demonstrate after a particular instruction and learning unit. The specific objective places emphasis on the child as an individual, hence each objective is formulated as “... the child will be able to ...” (CRDD, 2004: I).

- **Column 3: Content**

This section describes the kind of content or information the teacher needs to teach in a topic. The teacher is not restricted to teaching only what is stated in this section. The teacher may decide to add additional information based on current information.

- **Column 4: Teacher and learner methodologies**

The fourth column presents the teaching and learning activities that encourage active child participation and ensure learners' enjoyment. The activities are to emphasise the three main knowledge domains of cognitive, affective and psychomotor development. Teachers are encouraged to provide stimulating activities and where necessary improvise play materials. Teachers are also encouraged to create their own rhymes, songs and games to achieve maximum learning outcomes.

- **Column 5: Evaluation**

This column presents suggested exercises to evaluate each unit. Evaluation activities include informal forms such as observation of children's performances and oral questions. Teachers are encouraged to develop other creative evaluative tasks. Table 1.1 provides an example of the organisation of the KG curriculum showing the five columns.

Table 1.1: The organization of the curriculum showing the five columns (Language and Literacy in KG 2: Pre-reading activities)

UNITS/TOPICS	SPECIFIC OBJECTIVES	CONTENT	TEACHER AND LEARNER METHODOLOGIES	EVALUATION
UNIT 5: PRE-READING ACTIVITIES Sorting	By the end of the unit the child will be able to: Sort objects according to colour, shape, size, height and type	Sorting materials and objects according to given criterion.	In groups, children sort different materials, real objects and pictures according to colour, shape, size and kind. Each group should perform a different task. E.g.:	Children sort objects individually, in pairs and in groups.

UNITS/TOPICS	SPECIFIC OBJECTIVES	CONTENT	TEACHER AND LEARNER METHODOLOGIES	EVALUATION
			Group 1 sorts according to size. Group 2 sorts according to colour. Group 3 sorts according to kind.	

(Source: CRDD, 2004:26)

“Pre-reading activities” is one of the 18 units of the KG 2 language and literacy learning area (subject). Sorting is one of the pre-reading activities in this unit. The teachers prepare their lesson notes around the topic and determine the specific objects to be achieved by teaching the content through different teacher/learner activities, after which they evaluate the learning outcomes by giving learners tasks to determine whether the objectives have been achieved.

1.4.1.3 General aims

The KG curriculum was designed with the aim of helping children develop the following knowledge, skills and attitudes:

- Develop communication skills that enable children to express their emotions, thoughts and actions in several ways, such as listening, speaking, reading and writing;
- Familiarise themselves with the environment and its living and non-living components;
- Learn to live a healthy life;
- Develop their psychosocial competencies such as assertiveness, self-confidence and relating positively to others;
- Awaken and develop their potential creative abilities;
- Respond emotionally and intellectually to the world around them through music and dance; and
- Appreciate and find pleasure in their own creations and those of others (CRDD, 2004: 1).

1.4.1.4 The researcher's critical reflection on the KG curriculum

The KG curriculum, like other early childhood curricula, emphasises activity and play-based teaching. However, a critical examination of the curriculum reveals that the curriculum does not define what it means by 'play' and how teachers should go about using it in implementing the KG curriculum. According to Fleer (2013), what a curriculum says about play is important, because that is what guides the planning, teaching and assessment in the early childhood setting.

Globally, most early childhood curricula (frameworks/guidelines) such as Te Whàriki of New Zealand (Ministry of Education, 2017), National Curriculum Guidelines on Early Childhood Education and Care for Finland (Ministry of Education, 2003), Framework Plan for the Contents and Tasks of Kindergarten, Norway (Norwegian Ministry of Education & Research, 2011); Aistear: the Early Childhood Curriculum Framework of Ireland (National Council for Curriculum & Assessment, 2009) and the South African Curriculum and Assessment Policy Statement (CAPS) Grades R- 3 (Department of Basic Education, 2011) make explicit statements regarding planning for play, teaching through play and assessing children's learning and development through play.

CAPS (2011:20), for example, provides detailed guidelines for enhancing learning through play. The document emphasises two ways by which teachers can promote literacy learning in Grade R: fantasy play and memory games and "purposeful intervention," where teachers use thought-provoking questions during free play to extend children's thinking and vocabulary.

Regarding planning for play, the Early Childhood Education and Care guideline for Finland (2003) recommends that teachers need to consider the time, availability of materials and space when planning for children's play. Teachers are encouraged to provide adequate and adaptable equipment to learners to support their play.

As regards assessing children's learning in the play-based curriculum, Te Whàriki at this level is aimed at "finding out what children know and can do" as well as what their interests are and what further learning experiences and support children might need (Ministry of Education, 2017:63). Accordingly, Te Whàriki requires that both formal and informal methods be employed to assess children's learning, focusing

on all aspects of children's development and learning. To this end, Te Whàriki suggests that informal assessment should include methods such as teachers listening to, observing and participating with children in their everyday experiences and events. Te Whàriki further adds that taking photographs, making videos and audio recordings and collecting examples of children's work are some forms of formally assessing children's learning. Such documentation helps teachers keep track of children's performance and is an appropriate means of supporting children's learning.

Part of the gap in the literature that the current study sought to fill was to design a professional development programme that equips kindergarten teachers with an approach to delivering the KG curriculum based on guidelines necessary for successful implementation of a play-based curriculum.

1.4.2 Early childhood teacher training in Ghana

Despite government's efforts in the past decades to improve teacher quality in Ghana, only 31.9% of KG teachers are trained (Associates for Change, 2016). Professional teacher training in Ghana takes two main routes: "pre-service in training institutions and in-service training at school, district or regional levels" (Tamanja, 2016:94).

1.4.2.1 Pre-service training institutions

In Ghana, pre-service teacher training is offered by the Colleges of Education (CoE) and Teacher Training Universities. Teacher students who receive their training through the CoE are awarded diplomas in education after a three-year study. Previously, teachers who went to the CoE received a certificate in education. The universities (the University of Cape Coast and University of Education), on the other hand, offer a range of education programmes that culminate in certificates, diplomas, bachelor's or master's degrees. Teachers who wish to pursue further studies after their initial training take up courses at the universities to upgrade themselves. In this way, the universities provide both pre-service and in-service training.

The universities offer training in two modes: teachers can enrol as full-time students, in which case they live in residences on the university campuses; alternatively, the

teachers continue working and take their studies through distance learning (teachers attend classes on weekends on satellite campuses) or by a mode referred to as the sandwich programme, where teachers attend lectures during long summer vacations. Tamanja (2016) observes that the sandwich programme has seen tremendous patronage since its inception, as the universities are unable to provide accommodation for all students who would have wished to attend the programme on a full-time basis.

1.4.2.2 In-service training

In-service training, as indicated earlier, is offered at various levels; from the local to the national level. Apart from the sandwich programmes run by the teacher training universities, they also organise sandwich programmes (through the CoE) mainly for untrained basic school teachers. The Untrained Teachers Diploma in Basic Education (UTDBE) programme is an example of such a programme (see the next section for a detailed discussion on UTDBE). The course content for both regular (pre-service training) and the sandwich programmes is basically the same (Associates for Change, 2016; Tamanja, 2016), but the duration of the programmes varies greatly. According to Tamanja (2016:107), the sandwich programme spends four weeks less to deliver the same amount of content that is delivered during the regular programme. Tamanja further notes that this situation puts the teachers under pressure to learn “just for the examination and forget afterwards.” The teachers therefore do not necessarily understand the course content and so are unable to apply the content in the classroom situation.

1.4.2.3 The Untrained Teachers’ Diploma in Basic Education (UTDBE) programme

As mentioned earlier, Ghana adopted several approaches to teacher professional development. This includes “in-service training in school, district, regional and national levels, distance and on-site sandwich education programme in teacher training universities” (Tamanja, 2016:94). One of the widely used routes is the UTDBE. The UTDBE is a distance learning professional development programme aimed at improving teaching and learning in the basic schools (KG-BS9), especially in disadvantaged areas of Ghana (Akoto, 2015; Associates for Change, 2016; Sofu, Thompson & Kanton, 2015). The four-year programme is delivered through

residential face-to-face sessions, which are held during school holidays in addition to self-study materials that provide students with reading, group and individual activities (Akoto, 2015).

However, several shortfalls in the UTDBE have been identified.

- Content: The content of some of the modules has been described as “theoretical” (Tamanja, 2016:107), “sketchy” and with inaccurate information (Associates for Change, 2016:52). Sofu, Thompson and Kanton (2015:10) observed that the content of the reading materials is full of “lengthy dialogues” which take more space than the actual learning content. Furthermore, the content has been described as irrelevant to classroom application (Akyeampong, 2010; Associates for Change, 2016). Associates for Change explained that the content appears to target senior high school teachers instead of KG teachers.
- Approach to classroom delivery: The instructional approaches that the tutors (lecturers) employed during the face-to-face sessions have been questioned (Associates for Change: 2016; Sofu, Thompson & Kanton, 2015). The authors indicated that, in addition to the hasty way the lessons were delivered, the lecturers’ instructional strategies did not actively involve the teachers. The teachers passively listened to lectures and wrote down notes that were read out to them by the lecturers.

This approach to teaching adults contradicts Knowles’ 1968 theorisation of instructional approaches to adult learning, which emphasises hands-on active adult involvement (Blondy, 2007). Although Knowles’ theory has been criticised for its lack of empirical underlining, Blondy (2007) believes we can still apply some of Knowles’ assumptions for training adults; for example, adult learners should be given opportunities to contribute to knowledge generation by sharing their experiences with their peers. The author notes that as adult learners share information among themselves, they get insight into new knowledge.

What is being suggested here by Blondy is that the design and delivery of a professional development programme must capitalise on adults’ characteristics that assist them to learn. This is why the IPBPDP sought to harness the teachers’ experiences and knowledge of indigenous play in designing and implementing the

programme. In this way, the programme is likely to be effective, as the teachers will feel a sense of ownership of the programme.

- Teaching practice: The lack of opportunities for the teachers to put into practice the knowledge and skills they acquired during the face-to-face sessions has detracted from the UTDBE. Associates for Change (2016) notes that this experience would have afforded the teachers the chance to receive feedback and support from their lecturers that would eventually help improve their classroom instructional practices.

As evident from the foregoing discussion, the UTDBE does not focus primarily on training KG teachers to implement a play-based pedagogy. Although the Associates for Change (2016) impact assessment of the UTDBE shows that the teachers studied a module relating to methods of teaching in the early years, (EPS, 123, principles and methods of early childhood teaching), it was not clear whether this includes the implementation of an indigenous play-based pedagogy. Therefore, the current study uses indigenous play to train KG teachers to implement the KG curriculum.

1.5 CONCEPT CLARIFICATION

The following key concepts and terms are clarified in the context of this study to ensure clear and mutual understanding.

1.5.1 Kindergarten

Kindergarten in Ghana refers to two years of pre-primary school education for preparing the four- and five-year-olds for formal school (Cooper, Allen, Patall & Dent, 2010). Kindergarten education is part of the mainstream basic education and is free and compulsory in Ghana. Thus basic education includes “two years of kindergarten education, six years of primary education and three years of junior high school (JHS) education” (Ministry of Education, 2010:15).

1.5.2 Play

Play can be conceptualised as involving critical thinking, creativity, experimentation, exploration, learning (Moyles, 2014), imitation (Briggs & Hansen, 2012), pretence, imagination (Beardsley & Harnett, 2013), risk-taking (Fleer, 2013), socialisation

(Piaget, 2013), rules, “imagination and illusion” (Vygotsky, 1980:93). Intrinsic motivation, free choice, active engagement, process orientation as opposed to product orientation, the development of an identity, self-concept and self-respect are considered some characteristics of children’s play (Briggs & Hansen, 2012:5; Lillemyr, 2009). Göncü, Jain and Tuermer (2007) theorise play as children enacting their social and cultural world through a range of expressions that are specific to the cultural communities in which they live.

For this study, play is defined as any activity that children (can) perform which engages their mind and imagination, enhances learning and is a demonstration of their awareness of their culture and, for that matter, of indigenous knowledge.

1.5.3 Indigenous play

Indigenous play refers to play that comes from the child’s “immediate socio-cultural” context (Abdulai, 2016:28).

1.5.4 Pedagogy

Pedagogy refers to a set of instructional techniques and strategies which allow learning to take place and offer the prospect for the attainment of knowledge, skills, attitudes and dispositions within a particular social and material setting (Siraj-Blatchford, Sylva, Muttock, Gilden & Bell, 2002). Siraj-Blatchford *et al.*’s (2002), definition of pedagogy extends to comprise the manner in which teachers work together with the learners and the environment. Siraj-Blatchford (2009) also defines pedagogy as all the processes and provisions that are considered to initiate or maintain learning processes. Consequently, in this study, pedagogy refers to all the instructional strategies that facilitates learning in the kindergarten classroom context.

1.5.5 Play-based pedagogy

Play-based pedagogy involves all the processes and provisions that are considered to initiate or maintain learning processes by employing play as the main context to achieve educational goals (Siraj-Blatchford, 2009; Wood, 2009). Play pedagogy encourages forms of adult and child joint play participation that are conscious of the child’s culture, creativity and spontaneity, with the view to promoting the child’s emotional, cognitive and social development. In play pedagogy adults provide

children with the emotional, social, cognitive and communicative resources to enrich the play, while the children, with their expertise in pretend play, in turn revive the adult's playfulness and improvisation capability (Baumer, 2013). Play-based pedagogy in this study includes using Anansi stories and other indigenous play as the context for teaching the kindergarten curriculum concepts.

1.5.6 Indigenous play-based pedagogy

Indigenous play-based pedagogy refers to the use of indigenous play forms as the main context of learning to promote teaching, learning and development (Abdulai, 2016; Agbenyega, Tamakloe & Klibthong, 2017; Onwauchi, 1972). Indigenous play-based pedagogy advocates adult-child joint indigenous play participation (Agbenyega, Tamakloe & Klibthong, 2017). In indigenous play-based pedagogy, both teachers and learners interact in a familiar social cultural learning environment where teachers provide learners with the emotional, social, cognitive and communicative resources to enrich the play (Baumer, 2013). Indigenous play-based pedagogy therefore provides an early childhood education that is culturally relevant to children by providing a familiar context and situation for teachers and learners (Abdulai, 2016; Awopegba, Oduolowu & Nsamenang, 2013; Tagoe, 2013). Indigenous play-based pedagogy in this study implies using play that are in the local communities where the participating schools are located to explore the KG curriculum content

1.5.7 Teacher

In Ghana, all teachers are categorised as professional or non-professional teachers. A minimum qualification of a Diploma in Basic Education/Early Childhood Education obtained from a higher education teacher training institution qualifies one as a professional teacher capable of teaching at the basic school level (from kindergarten to the junior high school (JHS). A non-professional teacher is one who has no certificate in education. A non-professional teacher could be:

- a person holding the Senior High School (SHS) certificate with three credits including English and Mathematics;
- a person with a diploma from an accredited polytechnic or other non-teaching tertiary institution; or

- a university graduate without a certificate in education (Ministry of Education, 2012a:13).

In this study a teacher is a person with a qualification in either basic education or early childhood education.

1.6 RESEARCH QUESTIONS

1.6.1 Main research question

The primary research question is:

How can a professional development programme of indigenous play-based pedagogy enhance teachers' knowledge, attitude and skills for improved delivery of the curriculum?

1.6.2 Secondary research questions

The secondary research questions derived from the primary research questions are:

1. What knowledge, beliefs and attitudes do teachers have about play-based pedagogy and how do these affect their practice?
2. How can the indigenous play-based professional development programme be used to enhance teachers' knowledge, attitudes and practices?
3. How can changes, if any, in teachers' knowledge and delivery of the curriculum after the programme be explained?

1.7 OUTLINE OF CHAPTERS

Chapter one: Overview and rationale

In chapter 1, the overview and rationale of the study as well as the background and context are presented. The primary and secondary research questions are included in the chapter, which concludes with the outline of the chapters of the thesis.

Chapter two: Literature review and theoretical framework

Chapter two reviews relevant literature that is based on the research questions. The chapter examines play from a global perspective, focusing on the importance of play in ECE, teachers' roles in children's play, approaches to play-based pedagogies and the factors influencing its implementation. The chapter further looks at play in the

African and specifically the Ghanaian context. The literature on different models of kindergarten teacher professional development programmes is included in this chapter. Finally, the chapter concludes with a discussion of the conceptual framework of this study.

Chapter three: Research methodology and procedure

Chapter three gives a description of the methodological approach and substantiates the choice of qualitative participatory action research design to answer the research questions.

Chapter four: Developing the indigenous play-based professional development programme

Chapter four provides a detailed description of the various phases of the development of the indigenous play-based programme.

Chapter five: The findings of the study

In chapter five, the major findings of the analysis of the semi-structured interview data, the reflective data and the observation data of the study are presented.

Chapter six: Discussion of the findings

This chapter contains a discussion and interpretation of the results and compares them with the existing literature. The themes that support and those that contradict the literature are presented in addition to the silences in the literature and new insights generated by this study.

Chapter seven: Conclusions and recommendations

A summary of the main findings with regards to the research questions and the purpose of the study as framed in chapter one is presented in this chapter.

1.8 CHAPTER SUMMARY

In chapter 1 I provided an explanation of the purpose and the rationale of the study. I clarified the core concepts and provided the research questions. Finally, I gave an overview of all the chapters.

In chapter two I present a review of the related literature, focusing on play-based pedagogies both from local and global perspectives.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

In the previous chapter, I presented the rationale, background and the context of this study. Chapter two reviews related literature in four main sections. The first section looks at play from a global perspective, with a focus on the importance of play in early childhood education (ECE), the role of teachers in children's play, different approaches to play-based pedagogies and the factors influencing the implementation thereof. The second section focuses on play in the African context, with emphasis on different forms of indigenous play in the Ghanaian context. The third section examines the literature on different models of kindergarten teacher professional development programmes and concludes with a discussion of the conceptual framework of this study.

2.2 THE CONCEPT OF PLAY: GLOBAL PERSPECTIVES

Historical and archaeological studies provide evidence that supports the claim that children in every culture play (Whitebread & Basilio, 2013). Whitebread and Basilio have identified two features that are unique to play in all human cultures. According to these authors, adults and children in every culture play. Secondly, play is multi-faceted, manifesting in a variety of types which differ in form and frequency in diverse cultures. These variations are the result of differing views that diverse cultures have regarding the nature of childhood (Whitebread & Basilio, 2013) and the value of play (Lester & Russell, 2010). For instance, in certain cultures adults see children's play as a waste of time and dismiss it; some restrain play as something perilous, whereas others consider it as a learning and socialisation tool (Lester & Russell, 2010).

As noted by Göncü, Jain and Tuermer (2007), play involves children enacting their social and cultural world through a range of expressions that are specific to the cultural communities in which they live. Hence, in the current study, the indigenous play-based programme seeks to provide the opportunity for kindergarten teachers to explore different forms of Ghanaian indigenous play (including games) that they could engage in with their learners as they implement the kindergarten curriculum

to promote learning and development of the Ghanaian KG child. When designing an indigenous play-based programme for implementing the KG curriculum, it is important to examine the importance of play to children from a global perspective.

2.3 THE IMPORTANCE OF PLAY IN THE LIFE OF THE YOUNG CHILD

Globally, scholars have suggested that play is important in the development and learning of the child (Fearn & Howard, 2012; Gill, 2014; Keniger, Gaston, Irvine & Fuller, 2013; Lester & Russell, 2010). This is perhaps the reason why Article 31 of the United Nations Convention on the Right of the Child (UNCRC) classified play as a right of the child. In support of the stance of the UNCRC, the International Association for Play (IPA) states that “Wherever children’s right to play is negatively impacted there are consequences for children’s health, development and well-being” (IPA, 2016:5). In other words, when children enjoy their right to play, they derive holistic benefit from it.

Therefore, as children play in different environments (indoors and outdoors), several aspects of their lives are developed and enhanced. To explore the importance of young children’s outdoor play, Gill (2014) analysed 61 empirical studies. The findings showed that when children engaged in outdoor (in nature) play, they improved in psychosocial health, language and social skills as well as physical fitness. For instance, Gill found that playing in nature improved pre-school children’s motor fitness. Additionally, it was evident from the review that children who took part in a school gardening project developed the habit of eating healthy and were exposed to scientific learning, unlike their mates who did not participate in such projects. Moreover, the gardening project also made children more aware of themselves, and they developed social skills too (Gill, 2014). Gill further explained that the benefit that children derived from their play was dependent on the style of engagement. For example, Gill found that more playful engagement such as free play and exploration produced health benefits as well as environmental awareness as compared with less playful engagement such as school gardening projects, which are associated with education benefits.

Examining the socio-emotional benefits of play, Lester and Russell, (2010:52) explored children’s play in relation to the development of adaptive systems (such as “pleasure, emotion regulation, stress response systems, peer and place

attachments, imagination, learning and creativity”) in children. They noted that play contributes to the development of children in all domains (emotional, social, physical and cognitive). They further explain that socio-emotionally, when children play, it promotes positive attachment with other people, thereby helping children to develop the ability to create and strengthen friendship. These friends, in turn, serve as a protective tool against stress.

In summary, “play provides limitless possibilities for learning and development. Through play, children naturally learn about their surroundings, express their thoughts and feelings, advocate for their own points of view, and learn to respond to other people’s perspectives” (Healthy Child Manitoba, 2015:2). If play is this important in the development of children, one would want to find out what teachers perceive to be the link between play and learning; and how these constructions influence the way the teachers support play in their classrooms.

2.4 PLAY IN ECE: PLAY RELATES TO LEARNING

There are divergent schools of thought about play and learning and the place of each in the education of the child. While some scholars think play and learning are two different things and need to be separated, others are of the view that they are two sides of the same coin and hence should be put together (Makaudze & Gudhlanga, 2011; Pramling & Carlson, 2008). In the view of Samuelsson and Carlson (2008), play and learning should not be separated from each other. They argue that in early childhood, children do not see play separately from learning. Both sides of the argument show how important these concepts of play and learning are in the life of children. Research have shown that a teacher’s understanding and view of the relationship between play and learning influence greatly their pedagogical decisions and practices such as classroom arrangement, the level of their involvement in children’s play and the provision of support to children (Einarsdottir, 2014; Fler, 2013; Wu, 2015).

For instance, Einarsdottir (2014) conducted a participatory action research study involving two Icelandic preschool teachers, each with about 20 years’ teaching experience. The study was part of a larger action research project involving preschool and first-grade teachers. Einarsdottir wished to find out how preschool teachers deal with play and literacy and whether their ideas about the connection

between play and literacy (learning) changed during the action research period. She found that although the teachers became more mindful of the significance of children's play in their learning, they remained steadfast in their beliefs that play should be separate from learning. Einarsdottir (2014:106) noted that this reflected in the way the teachers handled literacy activities; reserving them for "specific well-defined periods".

A similar result was reported by Wu and Rao (2011) when they examined early childhood educators' perceptions of the relationship between play and learning in German and Chinese cultures. Twenty-two Chinese and 15 German early childhood educators took part in the study, in which early childhood educators watched and explained videotapes of play episodes from their own settings as 'insiders' and then watched and commented on tapes from the others' context as 'outsiders'. They reported that teachers' view of play and learning was mirrored in their classroom arrangement and influenced their level of participation in children's play. According to the study, Chinese teachers linked the acquisition of pre-academic and cognitive skills with children's play and frequently intervened in it, unlike their German counterparts, who believed children's free play allowed them to acquire social and decision-making skills and to deal with life.

Teachers' understanding of the relationship between play and learning also influences how children conceptualise this relationship. Wu (2015) investigated the views of 48 children between the ages of three to five years old. Half of the participants were German children and the others were Chinese. Data for the study were collected through observations of children's classroom learning and play activities and through interviews with children. Wu (2015) reported that in contrast to the German children, who viewed play and learning as inseparable, most of their Chinese counterparts viewed learning as separate from play. This, in Wu's view, was due to the structure of the individual classrooms. Chinese classrooms reflected an academic orientation, while the German classrooms allocated much time to free play. What is implied here is that the teachers' philosophical orientation regarding play and learning is usually made evident in their classroom arrangement and organisation.

The argument that is put forward in the foregoing discussion is that teachers' views of the relationship between play and learning influences the way they arrange their classroom learning environment, the level of their involvement in children's play and the kind of support they provide for children during play. In the current study it was necessary to draw the attention of the teachers to children's learning and holistic development (language and literacy skills, pre-academic skills, social skills and cognitive skills) through the implementation of the indigenous play-based programme. This programme sought, among other things, to introduce teachers to organising their learning environment to reflect the philosophical underpinning of the indigenous play-based pedagogy (teaching and learning through indigenous play). In this regard, it is relevant to examine the roles of teachers in children's play to facilitate children's learning and development.

2.5 THE ROLE OF ADULTS IN CHILDREN'S PLAY

Controversies about adults' role in children's play seem far from being resolved (Tarman & Tarman, 2011). While some scholars believe children's play must happen without adult involvement (Makaudze & Gudhlanga, 2011), others think the important issue to consider should rather be how much adult involvement is needed in children's play (Tarman & Tarman, 2011).

Einarsdottir (2014), Fleer (2015), Hakkarainen *et al.* (2013), Little and Wyver (2008) and Pramling and Carson (2008), all agree on the key role of adults in children's play. However, it is observed that the role that teachers perform in children's play is influenced by the teachers' theory of play (Dockett, 2011). Dockett, (2011:39) explains that early childhood teachers who view play as "natural, intrinsically motivated, and free choice" take the backstage, handing over "ownership and control" of the play to the children. Such teachers, according to Dockett, adopt a "constructivist approach" to play and hardly intervene in it. The roles of these teachers usually included "watching, observing or facilitating play." On the other hand, Dockett notes that the teachers who adopt a "socio-cultural" approach, in addition to providing children with resources and facilitating play, place more emphasis on "active adults' involvement in play and a high level of scaffolding." These teachers believe that by actively engaging in children' play, they are able to introduce children to more complex play.

Fleer (2015) studied teachers' roles in children's imaginary play in play-based settings in Australia. The study revealed that the teachers mostly assumed supervisory roles. Fleer noted that most of the teachers were positioned outside children's play, providing resources instead of entering the children's play. She further reported that there were hardly any cases of adults initiating and leading children's play, as suggested by Bodrova (2008). Fleer (2015) explained that the distance between the teachers and children during play influenced the kind of support they provided to children. She found that when the teachers were near children, they were able to enter children's play and provided the appropriate support to children. Furthermore, Fleer observed that the teachers missed opportunities to provide children with the right support when they sat far from where the children engaged in their play.

In a similar study conducted in Finland, Hakkarainen *et al.* (2013), reported that although the adults were near and joined in children's play, they failed to understand the children's play intention. Being involved in children's play goes beyond just being part; teachers need to be actively involved in children's play (Dockett, 2011) by communicating with children during the play for the adults to follow and understand the direction of the play. The indigenous play-based pedagogy provides a familiar context for both kindergarten learners and teachers that enables teachers to join in children's play. The teachers provide children with the necessary support (appropriate vocabulary, play materials and other tools) that will enhance children's play and consequently help teachers direct children's attention to concepts embedded in those play activities with the view to achieving curriculum goals.

Li (2013:21) also studied the role of the adult in the development of imagination and the heritage language of an Australian-Chinese pre-schooler in a joint play with the father. Li reported that by using questioning and negotiation strategies, the adult encouraged the child to explore new concepts and the meaning of words within context. Consequently, the child "was able to develop her abstract thinking, which resulted in an improvement in language and vocabulary."

Clearly, when teachers join in children's play and employ relevant support strategies, they can adequately facilitate children's construction of knowledge and

concepts. The indigenous play-based programme sought to equip kindergarten teachers with relevant skills, knowledge and strategies to enable them to effectively support children's development and learning of concepts while implementing the KG curriculum. To do this, it is important to see the different approaches to early childhood curriculum implementation around the world and how play is positioned in these curricula.

2.6 EARLY CHILDHOOD CURRICULUM IMPLEMENTATION

Early childhood curricula all over the world are delivered through various pedagogical approaches. Hirsh-Pasek, Golinkoff, Berk and Singer (2008:19) identify two approaches to the preschool curriculum: the "empty-vessel" approach and the "whole-child approach." The empty-vessel approach is characterised by direct instructional practices, teacher-centeredness, worksheets, memorisation and drills. In this approach children are viewed as blank slates, passively absorbing the teacher's knowledge; learning is put into learning areas or subjects and school readiness is limited to cognitive learning. In the empty-vessel approach, developmental dimensions such as social skills and other skills needed for children's learning are relegated to the background.

The whole-child approach, on the other hand, sees the child as an active constructor of knowledge who learns by exploring and discovering. This approach emphasises playful learning, where children find meaning in every interaction they have within a rich environment under the guidance of a supportive adult. In the whole-child approach, learning is seen as an integrated whole and not as fragments.

In view of this, several scholars (Abdulai, 2015; Bodrova, 2008; Cigman, 2014; Fleer, 2015; Goouch, 2008; Hakkarainen *et al.*, 2013; Pramling & Carson, 2008; Siraj-Blatchford, 2009 and Wood, 2009) support a play-based approach to the early childhood curriculum delivery. This is because play-based teaching reduces stress in the classroom, cultivates happiness, pride and confidence and fosters communal attachment; all of which increase academic achievement (Diamond & Lee, 2011). Brown (2017) concurs and adds that play-based learning enhances child-initiated investigations and promote social development among children. Through play-based pedagogies, children are provided with specialised pedagogy that engages

them and focuses on the children instead of a pedagogy based on the delivery of knowledge and predetermined curricular goals (Goouch, 2008).

Hence, an early childhood curriculum delivery should employ pedagogies that capitalise on children's desire to learn; their competence in their activities and their ability to invite collaborators (Goouch, 2008). In Goouch's view, play-based pedagogy helps to nurture and sustain these characteristics. Therefore, different play-based pedagogies need to be explored in early childhood education.

2.6.1 Play pedagogies

Edwards and Cutter-Mackenzie (2013:327) describe play-based pedagogies as occurring on a continuum ranging from "open-ended and freely chosen" play to more teacher-oriented play-based activities. Although the authors do not completely disregard "freely chosen open-ended" play oriented pedagogy when it comes to knowledge construction and the teaching and learning of concepts, they believe that a more teacher-oriented play-based pedagogy is relevant for knowledge construction and the teaching of concepts.

Edwards and Cutter-Mackenzie (2013) note that teacher-oriented (pedagogical) play seeks to keep an equilibrium between child-initiated play and teacher-directed play activities. Pedagogical play (also known as conceptual play, pedagogical activity, intentional teaching and educational play) encourages adult engagement in children's play activities with the view to deliberately providing children the needed support. The role of the teacher in pedagogical play, according to Edwards and Cutter-Mackenzie (2013), is to provide support for children's learning during play instead of a more instructive approach of directed teaching.

In spite of the many studies that support play-based learning in ECE, it is no secret that in recent times play-based learning has gradually been replaced with more academic instructional approaches because of seemingly irresistible pressure on teachers (Desouza, 2017; Dockett, 2011; Ogunyem, 2016; Roberts-Holmes, 2015; Rogers & Evans, 2008).

2.6.2 Factors influencing implementation of play-based pedagogies

Recent publications globally have shown that early childhood curricula and pedagogy are steadily moving away from the well-established child-centred, play-

based learning towards more formal school approaches (Bassok, Latham & Rorem, 2016; Desouza, 2017; Dockett, 2011; Nicolopoulou, 2010; Ogunyemi, 2016; Roberts-Holmes, 2015; Rogers & Evans, 2008). Researchers have identified several factors that are responsible for this shift, such as pressure from government and other stakeholders (Roberts-Holmes, 2015), teachers' pre-service training and deficiencies in curriculum guidance (Smith, 2015) and teachers' misinterpretation of the curriculum (Dockett, 2011).

2.6.2.1 Pressure from government and other stakeholders

Studies have shown that early childhood educators all over the world are facing difficulties in implementing play-based pedagogy due to pressure from governments, parents and school principals to meet set targets in the form of completing topics in the curriculum (Broadhead, Howard & Wood, 2010; Bodrova, 2008; Lynch, 2015; Miller & Almon, 2009; Moyles, 2010; Ogunyemi, 2016; Rogers & Evans, 2008).

In the UK, for instance, the government's continuously increasing policy regulation, which is explained by the quest of the country to be part of a "global education race" that commences in preschool, has proven to be a major setback to the delivery of a play-based pedagogy in the early years (Roberts-Holmes, 2015:302). Roberts-Holmes (2015) observed that government's focus on children's performance in numeracy and literacy, for example, has influenced the pedagogy early childhood educators in the UK employ in the early childhood settings. Roberts-Holmes states that the teachers feel under pressure to fulfil government demands of producing data for education authorities instead of employing child-centred play-based pedagogies. This is how one of the teachers in Roberts-Holmes' study put it: "It's all based on data ..., the data is driving the pedagogy" (Roberts-Holmes, 2015:206). Roberts-Holmes (2015) explained that as much as the teachers tried to hold on to their philosophy of child-centred, play-based learning in their learning centres, they could not implement play-based pedagogy.

The UK is not the only country where government policy regulations impact negatively on the implementation of a play-based pedagogy in the early years. In the Netherlands, the introduction of a mandatory curriculum defeated teachers' quest to be "good pedagogues" to their learners through the implementation of

pedagogies that were beneficial to the children (van Oers, 2014:20). According to van Oers, (2014), a good pedagogue places emphasis on the holistic development of the child, bearing in mind the child's personal characteristics as well as their cultural needs. To achieve this, the teacher needs the freedom to make relevant decisions, which is forfeited by compliance with the dictates of a mandatory curriculum. The situation is similar to what is happening in kindergarten classrooms in the United States.

In the United States, an associate professor of Curriculum and Instruction in Early Childhood Education at the University of Texas, Christopher Brown, notes that kindergarten teachers have replaced play-based learning opportunities such as the sensory table and dramatic play centre with teacher-directed teaching time, writing areas and sight words that children must commit to memory. The teachers engage children for long hours doing academic activities such as practising sight words, decoding word drills and completing science tasks (Brown, 2017). Brown notes that children have recesses of only 15 minutes or so. This situation, Brown observed, was due to the pressure on both the teachers and their learners to achieve higher academic levels (Brown, 2017; Brown & Lan, 2015).

Early childhood teachers in Africa have also had their fair share of pressure from stakeholders in the ECE sector. In South Africa, the introduction of the Curriculum and Assessment Policy Statement (CAPS), for example, plugged early childhood educators into a lot of implementation difficulties (Badugela, 2012; Maharajh, Nkosi, & Mkhize, 2016). Maharajh, Nkosi and Mkhize (2016) examined how teachers experience the implementation of CAPS in three primary schools. The findings show that the teachers found it difficult to implement the curriculum because they lacked the skills and knowledge needed to implement the curriculum. Hedges and Cooper (2018) argue that ECE teachers need to draw upon their professional knowledge and skills to be able to effectively employ a play-based pedagogy. Therefore, ECE teachers who lack the necessary competencies for implementing the curriculum are not likely to achieve success even if they try.

2.6.2.2 Deficient curriculum guidance

The characteristics of play and the way play is used in an early childhood curriculum could influence the way the teachers implement the curriculum (Bodrova & Leong,

2010; Rogers & Evans, 2008). Rogers and Evans (2008:16) indicate that the characteristics of play (intrinsic motivation, spontaneity and free choice) render play unsuitable in “an educational culture that prioritises accountability, measurable results and tangible outcomes.”

Bodrova and Leong (2010:1) concur and point out that ‘play’ and ‘curriculum’ contradict each other. The conceptualisation of play as a spontaneous, child-initiated activity that does not fulfil any practical need contradicts the concept of a ‘curriculum’, which is concerned with intentional teaching planned to achieve set learning outcomes. To resolve such a contradiction, Bodrova and Leong recommend that curriculum documents should be specific in the way the word ‘play’ is used. They suggest that the term “playful learning” should be used in curriculum documents to express the intentional use of play for teaching purposes. They add that the distinction between play and playful learning must be reflected both in their objectives and the exact pedagogies that go with each of them.

What emerges here is that early childhood educators could fail to implement an early childhood curriculum with the recommended play-based pedagogy due to lack of adequate and clear guidance from the curriculum document itself. In this vein, the IPBP is specific on guiding the kindergarten teacher in the use indigenous play such as Anansi stories and Nana wo ho in implementing the KG curriculum.

2.6.2.3 Pre-service teacher training

The kind of pre-service preparation early childhood educators receive could determine the way they employ play-based pedagogy in the early childhood settings. Smith (2015) reported that early childhood teachers were unable to teach through play because the pre-service training the teachers received did not equip them with the relevant knowledge to understand and implement play-based teaching. The teachers explained that during their university training, the lectures they received did not explain in depth, with practical demonstrations, how they could plan and implement play-based learning in their classroom situations. The teachers stated that they felt like they did not even understand what play-based learning entails. This view agrees with Cunningham’s (2014) assertion that several teacher education programmes are struggling to design instructional models that can equip early childhood teachers with the competencies they need to teach young children.

While it is true that lack of adequate training results in early childhood teachers not being equipped sufficiently with the skills, knowledge and attitudes to implement child-centred, play-based pedagogies, it is also important to note that some teachers, though adequately trained, could not implement the things they learned during their training. Atmore, van Niekerk and Ashley-Cooper (2012:133) assert that qualification (in other words, training) does not necessarily determine the quality of teaching. Atmore *et al.* advance three possible reasons why teacher training or a qualification does not necessarily produce quality teaching: “a lack of practical demonstration and instruction during training; a lack of on-site support to assist with implementation of theoretical training; and a lack of follow-up after the completion of training so as to ensure consistent implementation.”

Rose and Rogers' (2012) results are in line with these findings, but went further to explore the link between teacher training and the pedagogical practices of preschool teachers in the actual teaching context (teaching practice). Rose and Rogers (2012:47) affirm that “the theoretical input students received regarding contextually appropriate practice was frequently in conflict with a very different reality.” The authors note that 95% of the student teachers in the study agreed that they could not apply the child-centred, play-based teaching strategies they learned during their teacher education because of the circumstances prevailing in those settings, where they were under pressure to introduce learners to more formal academic work. Hence, the teacher-trainees could not do otherwise, even though they knew that the right thing to do was to engage children in child-centred, play-based activities. As Cunningham (2014) pointed out, new teachers face the risk of being resisted by their principals and older teachers in their attempt to change the way instruction is given in ECE settings.

In another study, Wen, Elicker and McMullen (2011) confirm that contextual factors such as parental expectation and professional training prevent preschool teachers from practising their beliefs regarding teaching and learning in the preschool. Their results further reveal that although almost all the teachers strongly approved of child-led learning, in actual practice they did the opposite, mostly giving direct instruction.

It is evident from the discussion above that the factors that influence the way early childhood teachers implement a play-based pedagogy are complex. In addition to the issues related to external pressure, some of the teachers were not adequately trained to be able to implement play-based pedagogy; and those who were trained and had clear ideas regarding what to do as far as preschool teaching and learning were concerned, are unable to do so due to context-related factors (Wen, Elicker & McMullen, 2011). In view of this, teachers need to be engaged in discussions that help them to reflect on their instructional choices. One way of engaging teachers is ongoing training with a focus on practical activities to help teachers acquire the needed skills, knowledge and attitudes to implement a play-based pedagogy. An Indigenous play-based professional development programme (IPBPDP), with a focus on equipping kindergarten teachers with the needed competencies for implementing the KG curriculum, seems to be the way forward.

In order to design an IPBPDP for Ghanaian kindergarten teachers, it is important to delve into play in the Africa context as a whole, with a specific focus on play in Ghana.

2.7 PLAY: AFRICAN PERSPECTIVES

The survival of any society is determined by how its young members are socialised into their culture and are equipped with survival abilities (Boakye-Boateng, 2010). In African cultures, play, 'work' and learning are inseparable (Boyette, 2016; Gwanfogbe, 2011; Michelet, 2016; Wadende, Oburu & Morara, 2016). This is because the delivery of learning content to African children involves wedging children's daily routines into the community and family livelihood (Boyette, 2016). Thus, as children engage in social life and leisure, including play in their community, they discover the embedded skills, knowledge and attitude inherent in such activities (Gwanfogbe, 2011). Therefore, children in Africa do not see any "difference between playing and working or participating and learning" (Michelet, 2016:234). Ng'asike (2014) explains that children's play activities are closely linked with the economic ventures of their families and communities and that children develop relevant skills as they participate in such activities.

Ng'asike (2014) observed the play activities of nomadic pastoral children in Kenya. Ng'asike noted that as the young children took care of the herds, they developed

the skill to distinguish scars on the hooves of the animals, for example. According to Ng'asike, this skill and the knowledge that these children acquire through this process of play are relevant for their future work of rearing animals.

This finding confirms a study conducted by Michelet (2016:234) in Asia. Studying Mongolian pastoral children, Michelet observed that they found working fun and hence were willing to participate in it on their own volition. The children took part in domestic chores such as stirring tea and hand washing small items. Michelet noted that through this “playful engagement with adults”, the children learned the “morality of work.”

In the African context, children's choice of play is motivated by the “values and goals that fit their fundamental schema” (Boyette, 2016:765). Boyette conducted a comparative study of two communities that occupy the tropical forest of the northern Congo Basin. The researcher systematically observed play activities of young children of the Aka foragers and the children of their Ngandu subsistence farming counterparts. The results of the study showed that the forms of activities that the children engaged in were motivated by the “cultural learning values” of their respective ethnic groups. Consistent with their cultural values (competition and status), the Ngandu agriculturist children engaged more in rough and tumble and competitive games than the Aka children. Aka children were seen to demonstrate “collective decision making, modesty and self-control” in their choice of play activities. The Aka children's play included only 7.6% of games against 34.6% of that of the Ngandu children.

Furthermore, in Africa natural contexts provide children with enormous play opportunities (Ng'asike, 2014:48). Ng'asike found that nomadic children in Kenya engaged in sand and water play at riverbeds. This river ecosystem also presents children with the opportunity to “hunt birds and squirrels, collect insects, and engage in livestock herding.”

Ogunyemi (2016) identified five varieties of childhood play in Nigeria. She mentioned physical play that included children running errands for adults within their neighbourhood; music and dance; children moving in groups and role-playing of adult roles (which falls under social play); children's free play, including using readily

available local materials such as empty cans, clay, sticks, and plastic to create objects with which they played; games with rules, consisting of games that already have established rules which children follow; and adult-moderated play, which included moonlight storytelling, community festivals and dancing.

Various authors agree that the different forms of play promote children's learning and holistic development (Bayeck, 2018; Ogunyemi, 2016; Onwauchi, 1972). In a Southern African study, Makaudze and Gudhlanga (2011) explored the game of riddles played in the Shona community of Zimbabwe. The game involves short oral puzzles in which objects and situations are covertly referred to in analogies to which children have to offer answers based on their understanding and observation of their environment. The study revealed that in addition to entertainment and socialisation, riddles promote children's learning and development in almost every domain. According to Makaudze and Gudhlanga (2011), riddles promote cognitive development; memorisation, quick and logical thinking as well as creative thinking. Furthermore, Makaudze and Gudhlanga (2011) contend that riddles serve as a socialisation tool for children as they learn to work in teams, observe social rules such as taking turns and develop public speaking skills. The findings also show that children learn about their customs, cultural values and acquire knowledge about their environment through riddles.

Again, findings from recent study conducted by Joseph, Ramani, Tlowane and Mashatole (2014:17) reveal that, an indigenous black South African Pedi children's game, Masekitlana, in addition to exhibiting characteristics similar to role play, also possesses features unique to it. Masekitlana, the authors say, is characterised by prolonged monologue, "metacommunicative frames for realistic thinking and a complex relation between social and solitary play."

African folktales have furthermore been found to develop academic and higher-order thinking skills in children. For example, Agbenyega, Tamakloe and Klibthong (2017) studied Ghanaian Anansi stories. The authors argue that Anansi stories can be used to teach academic concepts to children. This is because an Anansi story will easily lend itself to discussion between the teacher and the learners, thereby affording the teacher the opportunity to evaluate learners' understanding and to

make all the necessary adjustments during lesson delivery, hence promoting learners' understanding of curriculum concepts.

To justify their claim, Agbenyega, Tamakloe and Klibthong (2017:121) employed "stimulated recall" methodology to investigate Anansi stories. The participants in the study included 23 five- and six-year-old kindergarten children and two elders (grandparents) in their 70s. The two elders took turns to narrate Anansi stories to the children. The stories were audio-recorded and later replayed to the children to stimulate the recall of their reflection and thought processes during and after the storytelling session. The researchers found that Anansi stories promoted cultural literacy and critical and higher-order thinking skills. The study further revealed that the aesthetic nature of indigenous Ghanaian folk stories added pleasure to learning, which in turn stimulated the children's imagination.

Additionally, Agbenyega, Tamakloe and Klibthong (2017:122) found that Anansi stories served as a tool for developing pre-school children's oral narrative and oral language skills and that the mentoring role of the adults provided opportunities for both adults and children to share their ideas in a "non-competitive" manner. The findings further showed that through Anansi stories, family and societal values were passed on from generation to generation. The authors concluded that Anansi stories enabled children to be creative and empowered them with social and spiritual values, which prepared them to understand their world better.

Moreover, African indigenous play promotes lifelong qualities in children. Bayeck (2018) found that through Oware (a board game), for example, children can develop skills such as patience, negotiation, spatial thinking and decision making. Oburu and Morara (2016) also noted that story-telling and a practical assignment afforded young children the opportunity to develop qualities such as being responsible for themselves and others; to do hard work and be truthful. Ogunyemi (2016) asserts that through social play children develop empathy, self-confidence and compassion.

Materials needed for play in the African context are cheap to design and readily available within the local context. Bayeck (2018) studied five board games from four African countries: Oware from Ghana; Bao from Tanzania; Moruba and Morabaraba from South Africa and Mweso (Omweso) from Uganda. Bayeck suggested that by

just creating holes in the ground on a playground, children could for example play Oware. What is being suggested here is that through the indigenous play-based programme, teachers are empowered to use diverse types of indigenous play and resources and to design play materials for children with little or no financial constraints.

As evident from the literature, indigenous African play has the potential to be employed in the teaching of young children in the kindergarten. However, there is little to no evidence of work that has systematically employed a theoretical underpinning to teach teachers how to unearth the potentials in this indigenous play for implementing it in the kindergarten curriculum. The gap that the present study sought to fill was to employ some theories to design a professional development programme that employs indigenous play to equip kindergarten teachers with the skills, knowledge and attitudes needed for implementing an indigenous play-based pedagogy.

The next section identifies and discusses selected Ghanaian indigenous play (Anhwe akyire, Ampe, Nana wo ho, Pilolo and Anansi stories).

2.8 PLAY IN THE GHANAIAN CONTEXT

Children in Ghana enjoy different forms of play, including games with rules that help them learn and develop (Abdulai, 2016; Agbenyega, Tamakloe & Klibthong 2017; Ohene, 1990). There are various categories of children's play: gender-specific games such as Ampe, Asorba and Nkro done by girls. Pilolo, Sansakroma and Merepe kwan ako are usually physical and are played by boys. Pinpina and Panpana are played by both sexes, either together or separately.

Other categories of children's play are physical play, visual memory play, role play and games with rules. Ohene (1990:2) notes that children's games used in a school situation should be simple to prevent frustration on the part of the children. Ohene therefore suggests that games that look complex could be adapted and simplified to the level of kindergarten children. Ohene also points out that children need to play in groups, large as well as small. In this regard, Ohene advises that adults need to ensure that all children are included in the games. He suggests that different children could be involved in various aspects of the game. For example, some

children could perform the actual game; others can sing and clap while the rest are looking on eagerly; “jumping, clapping or just giggling happily.” Later in this section I describe the following indigenous Ghanaian games: Anhwe akyire, Ampe, Nana wo ho and Pilolo. I selected these games for discussion as these are some examples of the indigenous games that are performed in the research context. Secondly, I enjoyed playing them as a child, which put me in a better position to understand their significance in kindergarten indigenous play-based pedagogy (Ohene,1990).

2.8.1 Anhwe akyire (do not look back)

The players (children) squat in a circle facing inward. One child runs around the circle with an object such as a handkerchief or a small stone in her hand. The other children (who are squatting) sing and clap their hands. She surreptitiously drops the object behind any child she chooses and continues the rotation, pretending to still have the object in her hand. If the child behind whom the object was dropped behind finds out, she quickly picks up the object and runs in the opposite direction, trying to reach her original place before the first child (the one who dropped the object). Of the two, the one who reaches her place last takes the object and runs with it around the group. On the other hand, if she does not notice that the handkerchief was dropped behind her back and the first child goes around and reaches her at the same place, she (the first child) gently pats her on her shoulders. It is then the second child’s turn to go around the circle with the object.

During the game, none of the children who are squatting are supposed to look back; and no child is supposed to draw the attention of the child behind whose back the object was dropped (Ohene, 1990). In photograph 2.1, some teachers (adults) are seen playing Anhwe akyire.



Photograph 2.1: Teachers playing the Anhwé akyire game

In photograph 2.1 some teachers (adults) are playing the Anhwé akyire game. One teacher is seen with a small stone in her hand going round the other players who are squatting, singing and clapping their hands rhythmically.

2.8.2 Ampe

Ampe is a jumping game that can be played by two or more girls. There are several ways this game can be played. First, as many as ten girls stand in a semicircle. The first girl stands facing the group. She starts the game with the second girl. They clap their hands as they jump, flinging forward one leg each at a time in the process. If a right leg meets a right leg or a left meets a left, it is “diagonal meeting,” which wins the leader a point. She then plays on with all the girls in the row until the end, and then the next person starts. On the other hand, if there is a “parallel meeting” where right is meeting left, then the two girls jump and clap again. Should there be another “parallel meeting,” the leader is out, and she stands at the end of the row to await another turn. The second child becomes the new leader to take her turn, jumping with the rest and following the same rules. The jumping and clapping are done rhythmically, accompanied by a jingle (Ohene, 1990:2).

In a second variation, Ampe is played in twos or in teams. Before the game starts, each side agrees on the type of meeting to win a point, for example, diagonal meeting for Adwoa group and parallel meeting for Afua group. Photograph 2.2 below shows two kindergarten girls playing Ampe. They decided that a diagonal meeting

wins a point for the leader; and any of them who reaches a total of ten points wins the game (ibid).



Photograph 2.2: Two kindergarten girls playing Ampe

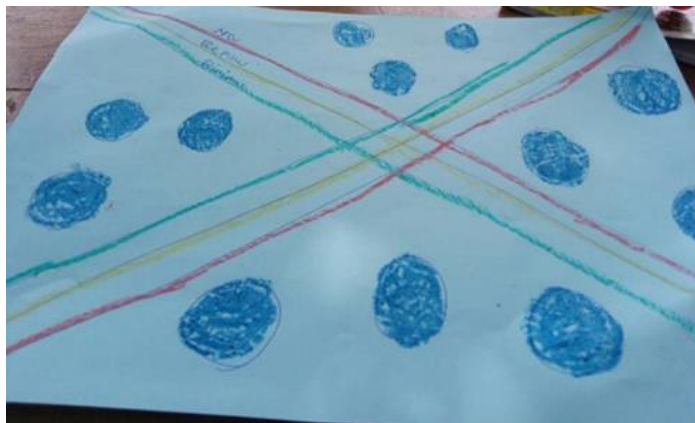
In photograph 2.2 both players put forward their right foot. This is a diagonal play in favour of the leader. They continue playing and counting until a winner emerges or until they are tired.

2.8.3 Nana wo ho

In Twi (one of the local languages spoken by most Ghanaians), 'Nana' is a title of honour and respect. A chief, queen or a respectable member of the community can be called Nana. A young person can be called Nana when he or she is named after somebody respectable. 'Nana wo ho?' is a question which means 'Is Nana at home?' In this game, Nana is assumed to have a lot of 'children'. A neighbour comes to Nana's home and requests that one of Nana's children runs an errand for her.

This visual-memory game is played by both boys and girls. To play this game one needs to draw a rectangle with three lines drawn from two corners to the opposite corners. The diagonal divisions of the rectangle produce four triangles within the

rectangle. Three small circles are drawn in each of the triangles. One small stone is put in each of the circles. Children usually draw the game on the ground in the sand with their fingers or sticks. The game can also be drawn on a piece of cardboard and laminated and used repeatedly in a school context. Photograph 2.3 is a drawing of the Nana wo ho game on cardboard.



Photograph 2.3: A drawing of the Nana wo ho game done on cardboard

Two people play the game at a time while the others look on cheerfully, awaiting their turn. The two agree on who starts first. It is played in the form of a dialogue. In an example of the game using two children, Enam and Eyram, the dialogue goes as follows:

Enam (turns her back to the board and asks): Nana wo ho?

Eyram (looking on the board and responds): Daabi (No).

Enam (continues): Anka Merepe ne ba baako asoma no (I would love to ask one of her children to run an errand for me).

Eyram (pointing to the first small stone, which represents one of Nana's children).

Eyi (This one)?

Enam: Aane (yes).

Eyram then removes one of the stones and places it in a container. They continue, the game by repeating the conversation. Without looking on the card, Enam systematically 'picks' Nana's children one after the other, always starting from the first child. Enam has to say 'daabi' (no) whenever Eyram points at an empty circle. If she forgets and says yes to an empty circle, Enam loses and another player gets his or her turn. On the other hand, if she finishes picking all three stones from the

first triangle, she must cross the three diagonal lines 'nsuo' (river), 'bipo' (mountain), 'biremu' (valley) of the next triangle. A winner can complete all the 'children' without losing. Children hardly complete picking all Nana's 'children' without losing, however they have a lot of fun as they know someone will lose in no time for them to have their turn. Photograph 2.4 shows a teacher and her learners playing Nana wo ho.



Photograph 2.4: A teacher and her learners playing Nana wo ho

In the photograph, a boy and a girl are having their turn playing Nana wo ho while the other children look on anxiously. The girl turns away from the game (which was drawn on the ground). She calls for 'Nana's children' as the boy points to them. When the girl gets it wrong, another child from the spectator group takes his or her turn.

2.8.4 Pilolo

Pilolo is a running game which both boys and girls enjoy. To start, an older child volunteers to oversee the game. He or she asks all the other players to go and hide behind a tree or a wall, while he or she (the older child who volunteers to oversee the game) hides several sticks. The number of sticks must correlate with the number of children playing the game. For example, if there are ten players, they need ten sticks. While the players hide, the moderator hides the sticks under a stone, in the sand, or just scattered on the playground. She then shouts out 'Pilolo', inviting all the players to come out and search for the hidden sticks. Once a player finds the sticks, she picks one and runs to a designated place and back. Points are awarded to the players based on the position they obtained, with the highest points going to

the first person and the lowest to the last person. The game is repeated several times until the children are tired and decide to take a break or call it a day.

From my childhood experience of playing Pilolo, I recall occasions when disagreements arose over a player pushing the other or cheating. The older child, who oversaw the game, saw to it that the matter was resolved amicably for the game to continue. In rare cases where a player falls and sustains injuries, the older child pauses the game (depending on the severity) and assesses the situation. If the situation can be handled by one of the players, the children handle it at their level. On the other hand, if it demands an adult's intervention, the injured player goes home to be attended to by his or her parents or by elder siblings (This hardly happens. Most of the time the child does not go home immediately for fear of being punished by her parents for sustaining the injuries).

There were also times when a loser was teased, but instead of the loser crying or fighting the other players, he or she ran after the teasers, turning the game into a chasing game. The children continue teasing and being chased until they get tired and start another game. Photograph 2.5 shows a teacher explaining the rules of the game to learners prior to its commencement.



Photograph 2.5: A teacher explaining the rules of Pilolo

2.8.5 Anansi stories (folktales)

One form of play that is performed by almost every ethnic group in Ghana is Anansi stories (folktales). Perrin (2007) asserts that Anansi stories, which means spider

tales, originated in Ghana and spread through all of Africa. According to Perrin, slaves brought Anansi stories to the Americas and the West Indies. Anansi stories, although called spider tales, can be told of other characters such as animals, humans and spirits. Anansi stories were usually told by elderly people and were used to teach moral values and virtues such as hard work, honesty, faithfulness and patience (Agbenyega, Tamakloe & Klibthong, 2017; Arko-Achemfuor, 2013).

The Akans are not the only ethnic group that performs folktales. They are performed in almost every one of the ten regions in Ghana. Different ethnic groups have different names by which they call the folktale, as shown in Table 2.1.

Table 2.1: Examples of ethnic groups in Ghana and what they call the folktale

Region	Ethnic group	Name
Ashante	Akan (Ashante)	Anansesem
Brong Ahafo	Bono	Anansesem
Central	Akan (Fante)	Anansesem
Eastern	Akan (Akwapim)	Anansesem
	Damgme	Ananzia (Ananziasiam)
Greater	Ga	Adesa
Northern	Dagbani	Salma
Upper East	Bulsa	Maa salem
	Frafra	Solima
	Mooshie	Sonera
	Hausa	Gaatana
Upper West	Sisala	Sunsuglo
Volta	Ewe (Anlo)	Gli
Western	Fanti	Anansesem
	Nzema	Anzegweke

The way a story is narrated is important to ensure that the listeners understand and remember the information that is being communicated (Brits, De Beer & Mabotja, 2016). Anansi stories have three parts: an introduction, a middle and an ending.

- **The introduction**

The story begins after the listeners (children, adults or both) have sat down in a semicircle or circle. The storyteller, who is usually an elder (older siblings can also tell Anansi stories), begins the story by introducing the title of the story. The title

given to a story depends on the point the individual storyteller wants to make. In other words, one story can be given different titles depending on the aspect of the story that the teller wants to emphasise. The storyteller then obtains the attention of the listeners by calling out 'abra abro' and the listeners respond 'yooyo'. With this, the listeners demonstrate their readiness to listen to the story. The storyteller then introduces the setting and characters in the story (Björklund, & Samuelsson, 2013). For example: 'Once upon a time Anansi and his family lived in a village called'



Photograph 2.6: A teacher narrating an Anansi story

Photograph 2.6 shows a teacher narrating an Anansi story to her learners in a kindergarten classroom setting.

- **The middle**

The storyteller continues to narrate the story, bringing the “characters to life,” by imitating both their voices and movements (Marshall, 2007:33). During the story, there are intermittent pauses for singing and dancing. There are two types of songs that are sung during the storytelling session; Anansesem mu nwom (a song related to the story, purported to have been sung by a character in the story), and mboguo. Anansesem mu nwom is sung by the storyteller to relieve boredom. It is also an opportunity for the storyteller and the listeners to join in singing and dancing. Mboguo, on the other hand, is sung by the listeners to bring a straying storyteller back on track. The listeners also get the chance to interrupt the storyteller to ask questions, make comments or to share their reflections.

- **The end**

The story is ended with a concluding statement which summarises the main moral lesson or importance of the story. For example, ‘therefore it is not good to be greedy’. The listeners are then asked to express their reflections regarding the effects in the story and what moral lessons they learned from it.

As evident in the discussion of the five selected Ghanaian indigenous games above, the indigenous games have the potential to develop children in all the domains and to help them learn academic concepts in the kindergarten. Table 2.2 summarises each of the games and how they could contribute to the development and learning of young children.

Table 2.2: Indigenous Ghanaian games and the aspects of development and learning they promote in children

Play/game	Type of play	Aspect of development
Anhwe akyire	Visual-memory	Concentration, perceptual skills, rhythm, coordination, self-regulation
Ampe	Physical	Spatial awareness, gross and fine motor development, eye-leg coordination, leadership roles, conflict resolution, anticipation, prediction, pattern, rhythm
Nana wo ho	Visual-memory/social	Imagination, perceptual skills, patterns, concentration, attention, speaking skills, vocabulary, social values (observance of rules, taking turns)
Pilolo	Physical	Problem-solving skills, decision making, hand-eye coordination, gross motor development, identifying clues, emotional development (sympathy, empathy, fun)
Anansesem	Social	Social roles and corresponding rules, imagination, language skills (speaking, listening), moral values, knowledge of the environment

2.9 INDIGENOUS PLAY-BASED PEDAGOGIES

It is a well-known fact that play-based pedagogies in early childhood education in Africa, and specifically in Ghana, are underpinned and fashioned by information on approaches that are implemented by programmes in Western contexts. This situation is problematic, as issues such as access to resources and beliefs and practices are not addressed (UNESCO & ARNEC, 2016). Hence the need for a contextualised pedagogy that promotes a culturally relevant kindergarten education that takes into consideration the sociocultural context of Ghana (Abdulai, 2016). The

next section examines an indigenous play-based pedagogy in an Australian context as a point of departure. The Djarlgarra Bush School programme was selected because of its underlining aim of integrating indigenous knowledge into the formal early childhood curriculum.

2.9.1 Djarlgarra Bush School: On-Country Learning (Australia)

The 'on-country' programme is a unique approach that has been introduced to educate the 4-8-year-old Aboriginal children of Australia. The programme, which was initiated by two Murdoch University professors (Libby Lee Hammond and Libby Jackson-Barrett), was developed in collaboration with the indigenous community (UNESCO & ARNEC, 2016).

The programme aims at integrating "on-country" learning into children's normal classroom learning experiences. For half a day once a week, the children, with their teachers and the project team, are bussed to a local setting, where an elder takes them through cultural learning experiences. The site that is chosen is significant to the Noongar people (of Australia). The approach, in addition to providing children the opportunity for outdoor learning, also aims to help children develop a deeper "cultural sense of belonging and responsibility for the land" (UNESCO & ARNEC, 2016:20).

The elder employs stories, activities, games and discussions on natural and cultural topics to share his knowledge and wisdom with the learners. The elder uses a combination of demonstrations and explanations to show the learners how certain cultural objects are used. For example, the elder demonstrates the diverse ways of using a "coolamon" (a wooden vessel). The elder shows the children how the "coolamon" could be used as a digging tool, as well as a bowl for holding water (UNESCO & ARNEC, 2016:35).

Every week, the group focuses on a concept such as "shelter, fire, food, hunting and fishing, and visual and performing arts to culminate with cultural celebrations" (UNESCO & ARNEC, 2016:31). These experiences help the child develop a sense of belonging and develop in them the spirit of patriotism. The children also engage in other activities such as dancing, singing (in the native language) and role-playing

of stories. The children use materials such as rubber snakes and spears to act out the stories.

The teacher who accompanies the learners is responsible for ensuring that the programme is extended and sustained. This he or she does by integrating the experiences of the 'on-country' learning into classroom lessons and following it up by creating opportunities and encouraging learners to share their knowledge and experiences with other learners, teachers and family members. As the children speak to others about their experiences, they develop social skills and self-confidence. I have observed that through this indigenous play-based pedagogy the learners benefit in several other ways:

- The learners: learn through meaningful experiences in nature;
- learning experiences incorporate children's prior knowledge;
- they are actively involved in co-constructing knowledge with their teachers and peers;
- they become agents of cultural knowledge and are willing to share their knowledge and experiences with others;
- they develop their identity, which boosts their self-esteem; and
- they acquire new knowledge and skills which they could apply to solve problems in their daily lives.

The pedagogical approach to the Djarlgarra Bush School: On-Country Learning project also affords the teachers the opportunity to learn and become more knowledgeable about the culture and the way of doing of the Aboriginal people making the teacher appreciate the unique culture of their learners. Again, the teachers can learn collaboratively with the learners. The indigenous play-based pedagogy employed in the on-country programme has also shown that through cultural practices such as traditional storytelling, children can learn academic subjects such as science and technology, numeracy, language and literacy, arts, music and dance. The approach promotes the use of readily available natural and human resources to enhance children's learning and holistic development. The features of the Djarlgarra Bush School programme resemble what has been suggested about African indigenous play-based pedagogies.

African indigenous pedagogies emphasise cultural and natural learning with collaborative adults. Awopegba, Oduolowu and Nsamenang (2013) assert that both the outdoor and indoor environment; as well as the available natural and human resources, present learning opportunities for young children. The authors suggest that the teacher can creatively make use of the natural resources such as shady trees in and around their school environment for children to engage in activities such as storytelling with their teachers. Teachers can also carefully select coloured wooden rods of assorted sizes from their environment to teach mathematical concepts (Awopegba, Oduolowu & Nsamenang, 2013). They suggest, for example, that the teachers could use a bamboo tree, which is green when fresh and brown when dry, to teach different concepts both in and outside the early childhood setting.

An indigenous play-based pedagogy ensures an integrated approach to teaching young children (Nsamenang, 2011; Sofu & Ocansey, 2014). Nsamenang (2011) asserts that the African approach to educating children does not separate learning content into disciplines such as mathematics, science or language and literacy. Learning, according to Nsamenang, is presented to the child as an integrated whole. This study sought to develop an indigenous play-based professional development programme that will equip kindergarten teachers with the relevant competencies to implement an indigenous play-based pedagogy.

2.10 PROFESSIONAL DEVELOPMENT PROGRAMMES (PDP)

This study is about enhancing kindergarten teachers' implementation of a play-based pedagogy through a professional development programme. It examines how kindergarten teachers could be trained to acquire the relevant skills and knowledge and develop relevant attitudes for the implementation of an indigenous play-based pedagogy in their classroom situations (Wen, Elicker & McMullen, 2011). In this study, a professional development programme (PDP) is viewed as an ongoing and collaborative process that can be adapted to the peculiar characteristics of kindergarten teachers to improve their knowledge, attitudes and skills (KAS) to influence teachers' classroom practice (Chang & Wu, 2015; Cunningham, Etter, Plastas, Wheler & Campbell, 2015; Onwu & Mogari, 2004). This implies that a collaborative and extended process of professional development is important for

teachers to acquire the competencies required to implement an indigenous play-based pedagogy.

Professional development programmes in recent years have been conceptualised by researchers and practitioners as key to teacher transformation around “curriculum, teacher role, teaching and learning to teach” (Einarsdottir, 2014; Sandholtz & Ringstaff, 2013; Tam, 2015:22). Various studies (Schachter, 2015; Tam, 2015; Wen, Elicker & McMullen, 2011) show that teacher professional development programmes change teachers’ content knowledge, pedagogical practices, attitudes and beliefs and ultimately improve children’s learning (Diamond & Powell, 2011).

Sandholtz and Ringstaff (2013) found that a year after a longitudinal professional development programme had been introduced in rural schools in the state of California, teachers’ content knowledge had greatly increased. Teachers’ instructional practices were also found to have changed. The findings agree with Kriek and Grayson’s study (2009:185) conducted in South Africa in which they also found that teachers’ content knowledge, teaching approaches and professional attitude were changed by a professional development programme. What is being suggested here is that a professional development programme is likely to be effective only when it is aimed at the needs of the teacher (Angadi, 2013; Sandholtz & Ringstaff, 2013). Therefore, in this study it was necessary to diagnose teachers’ needs when implementing the indigenous play-based professional development programme.

2.11 EARLY CHILDHOOD TEACHERS’ PROFESSIONAL DEVELOPMENT PROGRAMMES

Schachter (2015) analysed 73 empirical types of research on professional development in Early Childhood Education. The study looked at the design, delivery and measurement of the outcome of professional development programmes (PDPs). Schachter revealed that more than half of the studies focused on language and literacy instruction; followed by socio-emotional development (20%). Only seven per cent of programmes focused on instruction in general and six and one per cent targeted mathematics and science respectively. Sadly, Schachter noted

that no study looked at social studies and therefore none on indigenous play-based pedagogy.

Schachter (2015) identified 35 different models PDP delivery in 40 studies. The studies used coaching and training workshops to provide the PDPs. Schachter observed that a variety of methods were employed to measure PDPs that focused on the outcome. The author noted that a little over half of such studies examined changes in teacher practice, which were usually measured with a researcher-designed instrument or report from the teachers themselves on their changes in practice, followed by 40% focusing on teacher knowledge and fewer than 20% that looked at changes in children's learning with a little over one-tenth (11%) examining changes in children's behaviour. Rather than measuring the outcome of a PDP in fragments, the indigenous play-based professional development programme (IPBPDP) sought to adopt an integrated approach to measuring the outcome of the programme by examining changes in teacher practice; changes in learner behaviour and changes in teacher knowledge. The IPBPDP applies some combined measurement strategies to examine the outcome of the programme: First, a self-designed (and validated) observation schedule and teachers' own reports of changes (in the form of reflective journals) are used to measure changes in teachers' knowledge and practice. Secondly, changes in learners' behaviour are measured through teachers' observations documented in the same reflective journal and through the researcher's own classroom observations.

It could be deduced from the above analysis that some learning areas are favoured at the expense of others. This is the gap in the literature that my study sought to fill. By focusing on kindergarten instruction, the indigenous play-based programme sought to design and implement a PDP that emphasises integrated approaches to curriculum delivery. Through the IPBPDP, the teachers are equipped with skills, knowledge and attitudes to systematically integrate many, if not all, learning areas, including social studies, to implement the kindergarten curriculum. This broadens the focus to include multiple learning areas. To design the IPBPDP, it is important to explore different models that are explored in the Early Childhood Education field globally.

2.12 MODELS OF EARLY CHILDHOOD TEACHER PROFESSIONAL DEVELOPMENT PROGRAMMES (ECTPDPS)

All over the world, ECPDPS adopt different models to improve ECE teachers' instructional practices. Although these models will not be replicated in the current study, different aspects of the different models could be applicable to the present study.

2.12.1 The United States: The iterative approach

In the United States, Diamond and Powell (2011:75) used the iterative approach with the aim to help preschool teachers improve their instructional practice of phonological awareness skills. The authors employed five "sequential small-scale studies" to implement the iterative approach. During the first study the researchers, through semi-structured interviews, tried to understand what the teachers already knew and were doing as far as the teaching of the selected language skills were concerned. The interview questions tried to elicit teachers' ideas on specific instructional practices that they employed in their classrooms. Based on the results of the interviews, the researchers revised their training resources to include those that focused on specific strategies to help the teachers in teaching those literacy skills.

In order to understand how the teachers used hypermedia resources and the challenges the teachers faced in accessing the resources, the second study included individual coaching of each teacher as well training in the use of hypermedia resources. Each participant was provided with a laptop computer that contained the hypermedia resources, which included video clips of early childhood teachers doing those lessons in similar classroom contexts and reading materials such as journal articles related to the topic. The teachers worked with the resources for two weeks, after which they made recommendations to the researchers. The suggestions and the data from the second study prompted the researchers to revise several of the hypermedia resources (*ibid*).

The aim of the third study was to evaluate the distance coaching approach employed by the researchers. Each teacher provided a video recording of a chosen lesson to the coach, who then provided feedback that was included in the hypermedia resources for the teacher. As in the previous studies, the teachers

provided comments on their experiences, based on which the researchers revised the materials appropriately. The fourth and the fifth studies followed the same feedback and revision loop until it was suitable for the teachers to implement (ibid). Although the specific components of the iterative approach could not be replicated in the current study (because of unavailability of laptops and unreliable electricity supply), certain aspects can be useful. These are summarised in Table 2.3.

Table 2.3: Aspects of the iterative approach relevant to the IPBPDP

Study and purpose	Use of results	Application to the IPBPDP
<p>Study 1 Interviews to elicit teachers' ideas on specific instructional practices that they used in their classrooms</p>	<p>The findings were used to revise training resources to include those that focused on specific strategies that teachers could use in teaching the literacy skills.</p>	<p>Diagnostic interview to understand teachers' ideas, views and knowledge regarding play-based teaching and using the information to appropriately design the workshop activities for the teachers</p>
<p>Study 2 Participants interacted with hypermedia resources (including watching video clips of early childhood teachers doing those lessons in similar classroom contexts).</p>	<p>Comments from participants were used to revise the hypermedia resources.</p>	<p>Capacity building Participants' discussions, identification and designing of materials for implementing the IPBP</p>
<p>Study 3 Participants provided videos of their instructional activities to coaches to evaluate the distance coaching strategy.</p>	<p>Comments (including challenges teachers faced when videotaping) provided by the teachers helped the researchers to revise the hypermedia resources.</p>	<p>Trialing: Giving teachers the opportunity to try what they learned during the workshop sessions; teachers in small groups plan and demonstrate the implementation of an indigenous play-based lesson, after which I provide feedback to help them improve their implementation of the IPBP. Narrative reflection: Teachers write daily comments on the different workshop activities to continuously clarify, modify and evaluate the IPBPDP.</p>
<p>Study 4 & 5 Pilot study of the complete implementation of the whole programme to check its functionality</p>	<p>Coaching approaches were revised to make it easier for both teachers and the coaches.</p>	<p>Classroom observation The teachers plan and implement the IPBP in their classroom settings. The aim of the first set of observation is to give me a general idea of the workability of the IPBP. Discussions with teachers, post-observation to share ideas that will help improve subsequent implementations.</p>

2.12.2 The Scandinavian context: A collaborative action research project in Iceland

In a Scandinavian study, Einarsdottir (2014) included two Icelandic preschool teachers in a collaborative action research project that was set up as a professional development course for the participating teachers. The programme aimed to provide opportunities for the teachers to explore the link between play and learning and to empower them with the needed knowledge and skills that would enable them to integrate play and learning, and ultimately, to influence teachers' instructional practice and ideas. The programme employed a four-phase design comprising "preparation, planning changes, implementation and evaluation" (Einarsdottir, 2014:98).

The preparation phase commenced with an invitation to the teachers to be part of the study, after which the teachers were taken through a presentation that explained the concept of action research to them. Following that, they were given an information booklet for further reading. The teachers were given the opportunity to discuss, reflect on and decide what the focus of the study should be; thus the teachers themselves determined what their training needs were. The teachers agreed on exploring the link between play and literacy. At this stage, the programme progressed slowly, focusing on specific aspects of the teachers' practice that they wanted to improve or change.

During the second phase, the **planning phase**, the participants listened to presentations from experts during fortnightly workshops that took place at the university. Opportunities were given to the teachers to discuss, reflect and report on the presentations. The next phase was the **implementation**, where the teachers put their ideas into practice. The teachers tried out their ideas by designing projects that they embarked on with their learners. The researcher also met with teachers at their school to discuss and examine their "ideas in action." After this, the teachers shared their success story of ideas that they had practised in a whole-group meeting with other participants and the researcher (Einarsdottir, 2014:98). The final phase included **evaluation and reflection**. During this phase the teachers reflected on and evaluated the influence of the programme on their practice.

During the study, Einarsdottir (2014) employed several methods to generate data, including classroom observation, using photographs, video recordings, journals, interviews and recordings of the meeting. Table 2.4 shows the data collection instruments, the ways in which data was captured and the aspects that are related to the present study.

Table 2.4: Summary of the data collection instruments, means of data capturing and how they are related to the present study

Data collection instrument	Ways of data capturing	Relevance to the current study
Observation	The teachers observed and recorded their own classroom practice. The researcher also observed the participants.	At research sites where there are two participants, they pair up and take turns to observe each other's classroom practice. As the researcher, I also observe the teachers' classroom practices.
Photographs	The photographs that were taken showed what the teachers were doing and the changes that they made during the study. The teachers used the photographs for presentation and reflection.	The teachers themselves take photographs of their practices that show the way they implement the IPBP as they learned it during the study. The photographs serve as a facilitation tool during an interview discussion that follows the observation.
Journal	Teachers recorded their reflections on specific events by indicating when, where, what, who, how and why they did things the way they did them.	The journal provides guidelines for the teachers to help them reflect on their implementation of the IPBP. They reflect on their preparation, presentation and assessment of their pedagogical practices. The teachers explain what they did, how they did it, when they did it and why they did it.
Interviews	Three interviews with each of the two teachers: one individual interview at the beginning and the second towards the end. The third was a group interview with the two teachers.	Two individual semi-structured interviews with each of the eight teachers: the first one at the beginning of the PAR and the second one towards the end.

2.12.3 Southern Africa: Systemic approach

In a South African study, the UNIVEMALASHI project, a school-based professional development programme for Foundation Phase (Grade 1-3) teachers, was designed with the aim to equip Foundation Phase teachers with the content knowledge and skills they would need to amend their approach to teaching, and consequently to be able to implement the outcome-based curriculum (Onwu & Mogari, 2004). The UNIVEMALASHI project adopted a district level systemic approach that involved the school, community, district, region and the province. The aim of the partnership was to develop a model for in-service training that would enable the implementation of the curriculum within the district to ensure the success of the project. Each system (school, community, district, region and the province) had well-defined roles and responsibilities. In view of this, the district education department was requested to identify Early Childhood Development (ECD) experts from within its domain who would help the teachers develop the skills and knowledge needed to implement the curriculum. District ECD specialists, for example, had the responsibility to occasionally visit the schools to observe teachers' classroom practices and to provide feedback (Onwu & Mogari, 2004).

To build teachers' capacity, the UNIVEMALASHI project held workshops to present outcome-related knowledge and skills to the teachers. The workshops commenced with an orientation that introduced the teachers and other relevant partners in the project to the terminology and rubric of outcome-based education. The emphasis at this workshop was on what the teachers wished to change in their classrooms. The workshop further afforded the teachers the opportunity to learn and experience relevant child-centred teaching methods that they were to use in their classroom contexts. Through modelling by expert facilitators, the teachers learned the qualities of an enquiry-based approach to teaching. The teachers observed, among other things, how children could be empowered to construct knowledge through this approach. The teachers also explored locally available resources and examined numerous ways of using those materials. During the workshops the teachers engaged in group work activities and problem-oriented learning. During the implementation stage the teachers kept reflective journals with which they recorded their observations in the teaching and learning environment. The journals were intended to help the teachers reflect on their practices and possible changes (ibid).

One key aspect of the UNIVEMALASHI project was the involvement of the community. The parents of participant schools were encouraged to assist their children with homework and the collection and preparation of learning materials. Once in a while the parents paid visits to the classrooms. The UNIVEMALASHI project, although it did not focus on training teachers to implement an indigenous play-based pedagogy, had certain elements that are relevant to the current study. These are summarised in Table 2.5.

Table 2.5: Summary of aspects of the UNIVEMALASHI project that are relevant to the current study

Aspects of the UNIVEMALASHI project	Relevance to the current study
Curriculum experts from among the personnel in the district education department where the study took place facilitated workshop sessions.	Selection of facilitators among the participants to take a lead role to describe, teach and demonstrate indigenous play.
Community involvement	Teachers identify parents and other elders in the community who could tell them Anansi stories and teach them other indigenous games. Teachers engaged with other teachers and older learners in their school's communities to collect, create and design materials for learning through the IPBP.
Use of journals	Teachers keep reflective journals that help them document their thoughts and experiences during the implementation phase
Feedback from experts	It would have been an innovative idea to employ an expert to observe and give feedback to the teachers on their implementation. However, I perform that role as the researcher who had in-depth knowledge of the implementation of the IPBP.

2.13 EFFECTIVE TEACHER PROFESSIONAL DEVELOPMENT PROGRAMMES

Angadi (2013:16) outlines five measures to put in place in order to make a teacher professional development programme effective. According to Angadi, PDP should:

- address the needs of both the teacher and the learners through approaches which are relevant to the school context;

- “be long-term, ongoing, sequenced and cumulative,” aimed at providing teachers the chance to gain new knowledge and skills, reflect on changes in their teaching practice and increase their capabilities over time;
- place emphasis on learners’ learning outcomes in a manner that allows teachers to make use of their new knowledge and skills;
- model learner-centred instructions to give teachers the experience of what they will use in their classrooms; and
- evaluate the programme success, both formative and summative.

Another factor that is likely to make a professional development programme effective, namely, to enhance teachers’ teaching, is the novelty of the programme and the changes teachers observe in their learners because of the implementation of the programme. Commenting on teachers’ changed practice after the UNIVEMALASHI project, Onwu and Mogari (2004) contend that the changes in the teachers’ attitudes, knowledge and practice were due to changes in the learners. The teachers indicated that the changes in their learners’ attitudes – contributing to classes, willingness to take an active part in lessons – encouraged the teachers to change. Onwu and Mogari’s (2004) findings agree with Kriek and Grayson’s (2009), namely that changes in the behaviour and the academic outcomes of learners prompt teachers to change their attitudes and beliefs. It is therefore interesting to explore the changes in learners’ behaviour following the implementation of the indigenous play-based programme.

Furthermore, for a teacher professional development programme to be effective, Tam (2015) suggests that the programme should be designed around effective learning activities, as such activities to enhance teacher dialogue and collaboration, and Kriek and Grayson (2009:198) found that “face-to-face workshops, reflective journals and assignments” were some of the effective activities for a professional development programme. In line with this stand, my study employs face-to-face workshops, group activities and teacher reflective journals.

2.14 THEORETICAL PERSPECTIVES OF THE STUDY

The aim of this study was to design an IPBPDP that would help equip KG teachers with relevant competencies to be able to implement the KG curriculum. Hence, it

was important to identify a theoretical perspective that could help the kindergarten teachers understand how concept formation occurs and to enable them to facilitate concept formation in the kindergarten classroom. Conceptual play, which is the main theory that is employed in this study to explain concept formation, is discussed below.

2.14.1 Conceptual play

Marilyn Fleer, a cultural-historical play theorist, developed the conceptual play theory in 2010. The conceptual play theory focuses on the relationship between play, learning and development (Fleer, 2013). The purpose of conceptual play is to explain how concept formation occurs, and this theory is likely to help kindergarten teachers to effectively handle the academic component of the kindergarten curriculum (Fleer, 2011).

In Fleer's (2011) literature review on play, she indicates that most of the publications and scholars conceptualise play from the point of view of the biological interpretation and maturational development as opposed to the cultural-historical interpretation. According to Fleer's observation, the biological interpretation views play as intrinsic with the stages of progression influenced by the age of the child. In contrast, the cultural-historical stance does not rely on the stage of development in terms of the age of the child, but takes the view that the progression of play is determined by the mediating role of adults and the social interactions that the child engages in as the medium for producing the complexity of the play activity. Based on this concept of child development, the focus is on all the collaborations children experience in their social and cultural environment.

The leading activity of children progresses from play in an early childhood setting to learning in the formal school context. Fleer explains that this understanding of how the child develops does not imply that learning does not occur in preschool, but that play dominates the activities of children. Fleer (2011) contends that current pressure from most governments for greater academic achievement in the preschool challenges these theorisations of play.

Fleer asserts that the literature on ECE agrees that play is intrinsic, normally free of any outside rules, child-centred, and is mostly started by the child. In the face of the

intensified attention on more intellectual results in play-based programmes, Fler recommends that the ECE sector defines a new way of viewing play. Fler suggest a theoretical framework that explains conceptual development, and she provides a new theory developed purposely to help early childhood educators to effectively handle the academic component of the early childhood curriculum. Fler's theory is underpinned by Vygotsky's (1966) original literature on play and his theory of imagination (2004) to demonstrate how play-based programmes could help children build their conceptual thinking. Fler also used Davydov's (2008) works on theoretical knowledge and dialectical thinking to show how play-based programmes could build children's theoretical knowledge, with imagination as the bond between "play as a leading activity in preschool and learning as a leading activity in school" (Fler 2011:225). Conceptual play is obvious when the child's perspective is considered in relation to that of the teacher (2011).

Traditionally, imagination is regarded as a separate activity and therefore removed from reality. Imagination is perceived to be contained inside an individual, as an individual construct (Vygotsky, 2004). Fler (2011) notes that this definition of imagination poses a challenge to ECE professionals working in a play-based programme to assume vigorous pedagogical roles to develop children's imagination. In addition, Fler observes that the early childhood professionals could not conceive imagination in relation to the formation of concept. However, imagination, when constructed through a cultural-historical lens, changes from being an inner, intuitive and regular practise to a conscious collective act, with mediation playing a leading role.

To demonstrate the link between imagination and reality, Vygotsky (2004:13) contends that "imagination is not just an idle mental amusement, not merely an activity without consequences in reality, but rather a function essential to life." According to Vygotsky (2004:17), imagination –

... becomes the means by which a person's experience is broadened, because he can imagine what he has not seen, can conceptualize something from another person's narration and description of what he himself has never directly experienced. He is not limited to the narrow circle and narrow boundaries of his own experience but can venture far

beyond these boundaries, assimilating, with the help of his imagination, someone else's historical or social experience.

Fleer (2011) asserts that children perform dual actions concurrently as they enter an imaginary situation during their play: they focus their attention on the exterior material world (reality) and simultaneously think about the meaning that they associate with this external engagement. Fleer further explains that a child can give an object a meaning, but can simultaneously, through his imagination, change the meaning of the object. In a scenario, a stick becomes a horse (to explain manner in which the child "inverts the object/meaning to meaning/object). Fleer explains that the external and obvious object – the stick – is no longer considered as such; but – through the internal process of imagination – becomes a horse and the child a rider". The child's attention now shifts from the object to the meaning she has given to the object. Fleer emphasises that by inverting the meaning of the object, imagination is now a conscious action that enables the child to travel from the "objective field (external material world) to the sense field (internal) in an imaginary situation" (Fleer, 2011:227).

Fleer (2011:227) draws a parallel between the tangible world that is offered to children in the ECE settings and the abstractions which are required through the course of concept formation. Fleer relates children's concurrent movement between the external and internal during play to the relationships between tangible and abstract that occur the ECE learning context. This means that imagination allows for the concrete-abstract relations that support concept formation, making the formation of concepts a mindful act by the child. Fleer notes that the child is able to give fresh connotation to the specific teaching context. Imagination therefore becomes the link connecting "both the object/meaning relations in play and the concrete-abstract relations which are foregrounded in schools."

In Fleer's view (2011:227), imagination and reality are dialectically related in a dynamic and complex manner. She states, for example, that when children engage in imaginative play such as role play there is a "movement towards reality" as the children discover the rules of the society that direct their chosen roles. Inside the imaginary world that the children build with their play fellows, the children test out the rules. In the same way, Fleer indicates that when children give new connotations

to things in their play, the children move away from reality; on the other hand, when they test out societal rules within their pretend play, they progress towards reality. In theorising the relationship between imagination and reality, Vygotsky (2004) asserts that imagination moves a child away from reality, making the child to experience a higher form of cognition that is expressed in the child's volition.

Fleer (2011) notes that consciousness of thoughts in play has its parallel in the consciousness of concepts in teaching programmes that are developed with the aim of supporting learning in schools. Children who think intentionally about concepts can utilise them in diverse ways in their everyday lives. In view of this, Fleer contends that consciousness and imagination should be vital to the child's development and learning.

Hence, when early childhood programmes promote imaginary play, they end up promoting children's competencies for tasks such as language and literacy, numeracy and environmental studies, which are typically intellectually challenging. Commenting on Vygotsky's 1966 work on play, Fleer (2011) explains that higher forms of consciousness results when play becomes complex. This occurs because as the imaginary play becomes complex, the focus, which was initially on the imaginary situation, shifts to the rules. Children then spend more time negotiating the rules of the imaginary play among players. This inversion of rules/imaginary situations makes it possible for children to spend more time outside the imaginary play, paying attention to the rules that guide the play, than inside of the play, playing the imaginary situation.

Fleer (2011) asserts that the situation is the same in games with rules. She mentions that players spend time focusing on the rules to ensure that all players understand and abide by the rules. Children's "development of higher order thinking skills progresses through imaginary play, leading children to move across the borders of inside the play and outside the play" (Fleer, 2011:229).

Reviewing the works of Kravtsova (2008) on children's roles inside and outside an imaginary situation, Fleer contends that the roles change. Thus children can perform inside or outside of the imaginary play. Fleer (2011:229) indicates that children need to have the experience of being in and out of play, as both need to be developed

simultaneously. This is because the position children assume in play determines play complexity, which also depends on the competence of players. Fleer notes that through play, children practise being in and outside an imaginary situation and being in and outside reality. Through play, children can distinguish between imagination and reality, making children able to work with actual items and abstract concepts. Accordingly, “imagination becomes the bridge between play as a leading activity in a preschool to learning as a leading activity in school” (Fleer, 2011:225). By conceptualising play in this way, children can give new meaning to objects and get the opportunity to engage consciously with their actual world.

According to Fleer (2011), children’s experiences of play enable them to engage with the real materials that are intentionally presented to them as symbols of ideas that their teachers want them to study. Again, when children engage in play that involves roles and the rules that show how the play should progress, they consciously think about concepts their teachers introduce to them in the learning programmes. This is because thinking consciously about rules in play is not different from thinking about concepts. When early childhood programmes promote the development of imagination, as discussed earlier, children are able to use nonconcrete signs, thinking and content knowledge that are required for early literacy and numeracy work. Fleer (2011) concludes that, by conceptually relating imagination and reality with the work of Vygotsky (2004) on imaginary situations in play, which includes providing new meaning to things and discovering societal rules by exploring roles, concept formation in ECE is constructed. This point of view of the child’s psychological development can then be theorised as conceptual play. Conceptual play is therefore a perspective on “how conceptual development happens in Western play-based programmes that require a focus on academic concepts” (Fleer, 2011:231).

Although Fleer applies the conceptual play theory to Western play, it can be applied to other contexts that employ play-based pedagogy in similar situations because the elements of the theory are general (Agbenyega, Tamakloe & Klibthong, 2017; Desouza, 2017; Li, 2013; Quinones, 2012; Ridgway & Quinones, 2012). Li, for instance, used this theory for Chinese cultural heritage children in her study; Quinones also employed the conceptual play theory in her study in Mexico with

Mexican children; and more recently, Desouza used the conceptual play theory to explore the way four-year-olds experience science in an early-years setting in the United States. The conceptual play theory has also recently been used in a Ghanaian study of KG children by Agbenyega, Tamakloe and Klibthong (2017). By using the conceptual play theory, I intend to determine how Ghanaian kindergarten teachers support children to form concepts through their engagement in Ghanaian indigenous play such as Anansi stories (folktales) and other familiar Ghanaian games. The selection of the play types is guided by the curriculum aims, bearing in mind how these play types relate to the elements of the conceptual play theory – in other words, topics that are amenable to the theory. Figure 2.1 illustrates imagination as the link between play and learning.

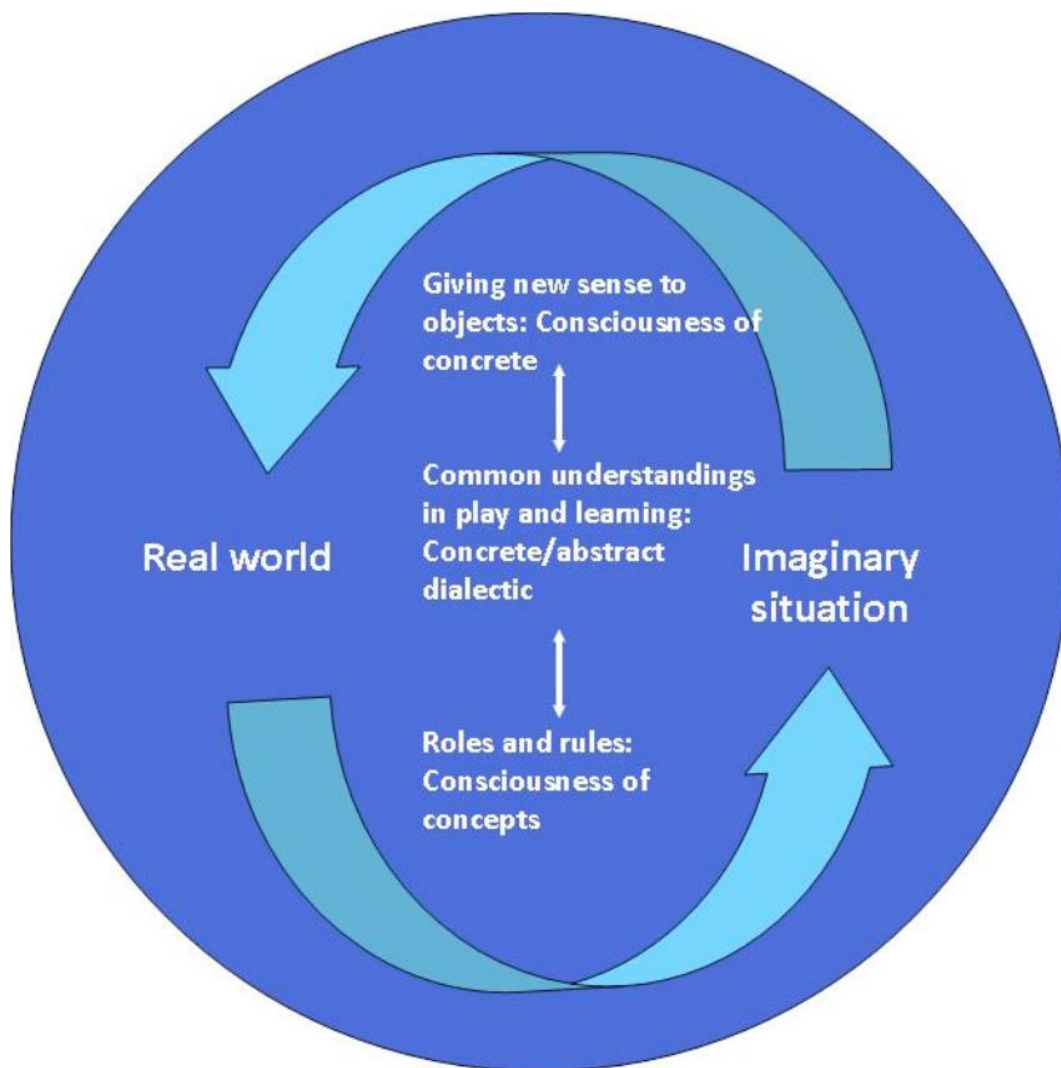


Figure 2.1: Imagination as the bridge between play and learning
(Fleer, 2011:232)

2.14.2 Integrating conceptual play with the indigenous play-based pedagogy

The Ghanaian KG curriculum makes it clear that kindergarten children should learn from everything that is within and around their environment. The curriculum calls for teachers to pay attention to the informal experiences that the children bring into the KG and create good conditions that help to consolidate and expand them. The teachers are expected to explore relevant child-centred, play-based instructional strategies to develop attitudes and skills necessary for school and life in learners (CRDD, 2004: II). In view of this aim, KG teachers should employ play-based pedagogies that recognise and nurture children's curiosity, creativity and problem-solving abilities and also emphasise concept learning that goes beyond numbers and shapes (Ministry of Education, 2012b). Considering the global call for academic work in the KG, an indigenous play-based pedagogy (IPBP) that is employed in teaching and learning in the KG is relevant. The IPBP comprises three stages, namely introduction, presentation and consolidation. In sections 4.3.2 and 4.3.3, I describe the underlying principles and the classroom application of the IPBP. With reference to a lesson in par. 4.3.3.1, I discuss how each stage of the lesson is described as conceptual play and how it is relevant for the formation of concepts in the KG curriculum from a cultural-historical perspective.

2.14.3 The conceptual framework that underpins the study

A conceptual framework is defined as “the system of concepts, assumptions, expectations, beliefs and theories that supports and informs” one's research (Maxwell, 2013:39). According to Ravitch and Riggan (2017:8), a conceptual framework is an all-encompassing argument that advances reasons for both the relevance of the study and the way the study should be conducted. Ravitch and Riggan indicate that the argument takes its root from the researcher's “personal interest and goals,” which are also influenced by the researcher's “identity and positionality.” Ravitch and Riggan further explain that the argument is formed through a literature review process, with the focus on empirical research. According to Ravitch and Riggan, the reason why a researcher reviews empirical research is to gain insight into the research problem, gain direction as to how to go about the study, identify gaps in the literature and learn about different methodological strategies. My aim in doing a literature review in the current study, therefore, is not

only to find literature that backs my perspectives, but also to locate rigorous studies that help to shape my study (Ravitch & Riggan, 2017:10).

As Maxwell (2013:41) argues, a conceptual framework is “constructed, not found,” therefore, I relied on information from the literature review, paying attention to the existing theories that are related to my study and would help design a professional development programme for kindergarten teachers to implement an indigenous play-based pedagogy. I provide a visual representation that summarises the conceptual framework in Figure 2.2. In Table 2.6, I provide an overview of the theories that relate to the different aspects of the conceptual framework, after which I further discuss the various perspectives that merge to form the conceptual framework.

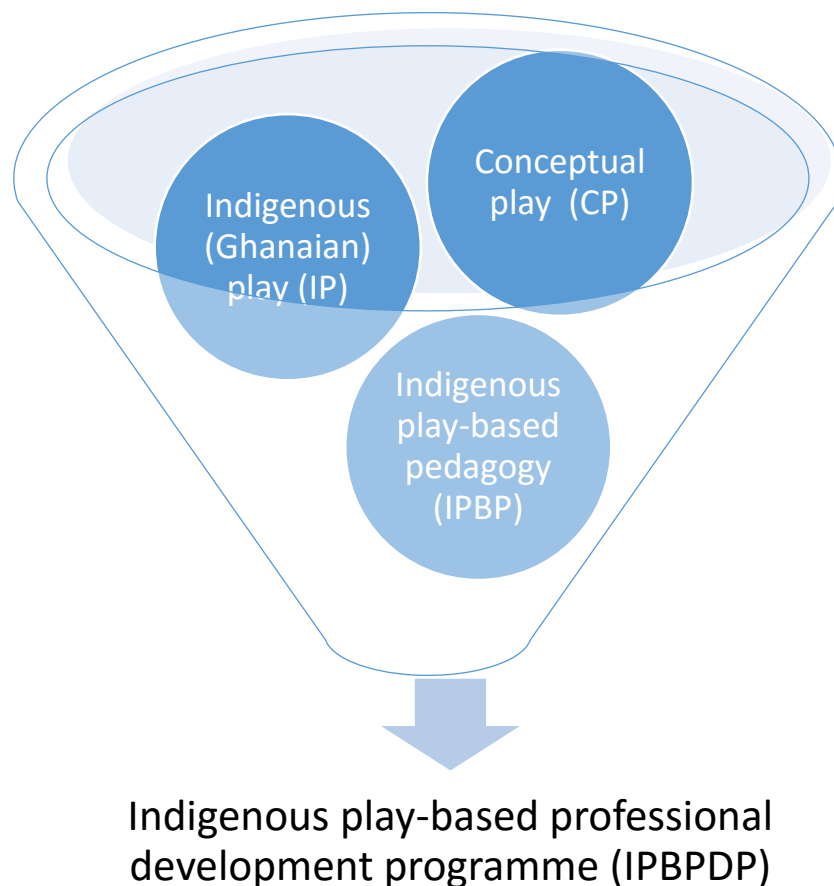


Figure 2.2: The conceptual framework for the IPBPDP

Table 2.6: Aspects of the conceptual framework and related theories relevant to the current study

Aspect of the conceptual framework	Related theories	Relevance to the study	Implication for the study
Indigenous (Ghanaian) play	Play as cultural expression (Göncü & Tuermer, 2007:160)	According to Göncü and Tuermer, (2007:160) children’s play is a reflection of their cultural tradition, which provides them with the opportunity to learn and develop within the social-cultural settings.	The IPBP provides opportunities for learners to engage in play forms that reflect their tradition.
	Forms of childhood play Ogunyemi (2016)	Ogunyemi (2016) categorises children’s play into: social (children moving in groups or playing adults’ roles in a role play); physical (running errands for adults in the neighbourhood); free play (children creating objects with readily available materials); games with rules and adult-moderated play.	The different forms of play contribute to children’s learning and holistic development. Opportunities are provided for teachers to explore the different forms of childhood play in order to promote its use in their kindergarten settings.
	Play from within the local community (Abdulai, 2016)	Abdulai (2016:28) defines indigenous play as play from the local community	Anansi stories, Nana wo ho and Pilolo are examples of indigenous Ghanaian play forms. Within the context of the indigenous play-based pedagogy, indigenous play provides a familiar context they can relate to and within which they learn.
Conceptual play	Conceptual play: Play, learning and development (Fleer, 2013:116)	Children’s learning through play is not automatic; it requires the active involvement of the teacher to facilitate conceptual development. By creating	The elements of conceptual play, such as creating imaginary situations, giving new meaning to objects and situations and rise to the concrete, are general

Aspect of the conceptual framework	Related theories	Relevance to the study	Implication for the study
		imaginary situations, children give new meaning to objects and situations and simultaneously live “in and out” of the imaginary situations to promote learning and development.	and easily lend themselves to integration into Ghanaian indigenous play forms such as Anansi stories, Nana wo ho and Pilolo to promote the learning of curriculum concepts and children’s development.
Indigenous play-based pedagogy	Contextualised pedagogy (Abdulai, 2016; Awopegba, Oduolowu & Nsamenang, 2013:10; Tagoe, 2012).	IPBP provides culturally relevant education to young children by exploring the learning potentials within indigenous play. This pedagogy, rooted in the cultural-historical theories of learning, emphasises children’s learning and development through their interactions with others in their environment.	The kindergarten teacher needs to be actively involved in children’ indigenous play by creating imaginary situations, providing relevant support such as materials and equipment that helps expand children’s play. The teacher, by asking children questions, guides children in learning pre-numeracy, pre-literacy and environmental studies concepts in the Ghanaian kindergarten curriculum.
Indigenous play-based professional development programme	Professional development programme as an on-going process (Chang & Wu, 2015; Cunningham, 2015:64; Onwu & Mogari, 2004:161)	Extended duration of a professional development programme gives teachers the opportunity to practise and master new knowledge and skills.	An IPBPDP developed and implemented through series of phases allows kindergarten teachers to acquire the relevant skills, knowledge and attitude for the kindergarten curriculum delivery.
	Effective professional development programmes	Effective professional development is designed with the needs of the teachers and learners in	The IPBPDP, through a diagnostic interview discussion, identifies in collaboration with teachers, their pedagogical and professional needs and

Aspect of the conceptual framework	Related theories	Relevance to the study	Implication for the study
	(Angadi, 2013:16; Guskey, 2000:x)	mind and focuses on content and related methods of delivery and continuous use in the classroom.	therefore their knowledge, beliefs attitudes regarding a play-based pedagogy.
	Guskey's model of evaluating professional development programmes (Haden & Kirkley, 2010:3)	According to Haden and Kirkley (2010:3), Guskey's five-level model of evaluating a professional development programme can be used as a tool for reflecting on the success and challenges associated with the implementation of a professional development programme.	Evaluating an IPBPDP after a year of its implementation gives the teachers and head teachers the opportunity to reflect on the success and challenges of the programme.

2.14.4 Discussion of the different perspectives of the conceptual framework

As shown in Table 2.6, the conceptual framework for the IPBPDP integrates play theories, including indigenous play, conceptual play and professional development theories such as those of Angadi (2013) and Guskey (2000). This integration affords teachers the opportunity to conceptualise play from both local and international perspectives and to apply the elements of conceptual play to indigenous play in a bid to deliver the kindergarten curriculum through the IPBP. I further discuss the various aspects of the conceptual framework below:

- **Indigenous (Ghanaian) play (IP):** This encompasses the use of the different forms of play in the local (indigenous) setting of the schools for teaching curriculum concepts in the kindergarten classroom environment (Abdulai, 2016). The different forms of IP (e.g. physical, social, visual-memory, role play, games with rules and adult-moderated play) promote learning and holistic development (Ogunyemi, 2016). The materials for these forms of play are readily available and can be easily constructed by teachers and the learners (Bayeck, 2018). For example, teachers can draw the Nana wo ho game on the ground with a stick. The process of drawing the game teaches the learners different lines and shapes such as triangles, rectangles and circles, for example. The children also get to count the different shapes and lines. If the teacher draws the game on a piece of cardboard or paper, she can use different colours for the different shapes, for example, green for all circles, red for all triangles and yellow for the rectangle.
- **Conceptual play:** The purpose of conceptual play is to explain how concept formation occurs in children (Fleer, 2013:226). Fleer's conceptual play is based on seven concepts; "namely: creating individual imaginary situations, meta communicative language, giving new meaning to an object, being in and out of imaginary situations simultaneously, doubleness of emotion, theoretical thinking and rising to the concrete". These concepts can easily be applied to different Ghanaian indigenous play forms. Table 2.7 provides a diagrammatic representation of Fleer's conceptual play, illustrating the child's play strategies and the teacher's play pedagogy.

Table 2.7: The teacher's and children's perspectives on conceptual play

Child's perspective: play strategies	Teacher's perspective: play pedagogy
Creating individual imaginary situations	Creating collective imaginary situations
Meta communicative language	Expanding verbal and non-verbal repertoire through drama and the telling and retelling of stories
Giving new meaning to an object	Giving children materials to deepen play
Simultaneously in and out of imaginary situations	Interested observer of children's imaginary situations- invited in, children share their play by sharing it or teacher introduces ideas relevant for expanding play-script
Doubleness of emotion	Emotionally charging a situation by exclaiming or reacting in an exaggerated way in relation to children's play
Theoretical thinking: system of concepts	Introduces concepts useful for children's play-scripts in order to deepen it
Rising to the concrete	Teacher helps children to reproduce their play in a form of a model in order to think more consciously about concepts learned in play

(Fleer, 2013:120)

Below is a further explanation of how the elements of conceptual play apply to the indigenous Ghanaian play forms. For example, an Anansi story can easily be integrated into the elements of conceptual play (Agbenyega, Tamakloe & Klibthong, 2017). By narrating an Anansi story, the teacher uses appropriate gestures to create a collective imaginary situation, uses metacommunicative language to describe sounds or actions of the characters in the story and provides materials to children that allow them give new meaning to objects and situations. To further expand learners' vocabulary, the teacher provides appropriate words to explain their thinking. To ensure conceptual development, as explained earlier, the teacher helps children make links between related concepts, making them learn things in a system of concepts. For example, the teacher guides children to make links between and among the various characters and how they relate to each other; the teacher also guides the learners through questions to explore the scenes in the story (within the imaginary situation). Finally, the teacher gives learners the opportunity to consciously think of their learning by retelling or dramatising the story and moulding or drawing the characters of the story.

- **Indigenous play-based pedagogy (IPBP):** Indigenous play-based pedagogy involves teachers using play that is within the local setting of the learners and the teachers to teach curriculum concepts and promote the development of the kindergarten child (Abdulai, 2016). The teacher purposefully plans learning and applies the elements of conceptual play to IP to achieve curriculum goals. The IPBP promotes the social-constructionist approach to learning, where children's agency in their own learning and knowledge construction within a social environment is encouraged (Ng'asike, 2014; Ogunyemi & Ragpot, 2015). The implementation of an IPBP requires a sensitive and open-minded teacher who assumes an active role in planning for play and actively engaging children in conceptual development through indigenous play. The implementation of IPBP though has not gained much attention in many countries, although it has proven to be successful in a country such as Australia, where the Djarlgarra Bush School On-Country Learning programme (discussed in par. 2.9.1) has successfully been applied as an integral part of the main curriculum. I am focusing on IPBP because I believe KG teachers can relate to it in their teaching and learning context.
- **The indigenous play-based professional development programme (IPBPDP):** Developing the IPBPDP could prove to be valuable in training teachers to systematically apply conceptual play to indigenous play in the classroom situation. The teachers could acquire relevant knowledge, skills and develop positive attitudes towards implementing an IPBP. The teachers could have the opportunity to explore the creative use of locally available materials and human resources in meaningful ways to promote learning through indigenous play (Onwu & Mogari, 2004). The IPBPDP model ultimately serves as a capacity-building process enabling teachers to implement an indigenous play-based pedagogy; besides acquiring knowledge and skills, they can collaborate with the researcher in solving problems that are of immediate concern to them – this gives the teachers a sense of ownership, which in turn encourages them to implement the outcome of the professional development programme.
- **Play-based pedagogies:** Exploring different play-based pedagogies gives the KG teacher an opportunity to examine different conceptions (understanding, values, beliefs, attitudes and experiences) of play-based pedagogy. Delving into different types of indigenous play and trying to understand its importance in the

life of the kindergarten child and in ECE could equip the KG teacher with the relevant knowledge and skills to implement a play-based pedagogy in the classroom context. Play promotes concept formation in children. Through play children experience being inside and outside of an imaginary situation. This experience helps children learn academic subjects such as numeracy, language, literacy and environmental studies (Desouza, 2017; Fleer, 2012).

2.15 CHAPTER SUMMARY

In this chapter, I reviewed literature under four main headings. I looked at play and play-based pedagogy as practised both internationally and nationally. I further examined different professional development programmes and identified aspects that could be used in shaping my study. In order to design an IPBP, I looked at different Ghanaian indigenous play forms (including games) that could be used to implement the KG curriculum. I concluded the chapter by constructing a conceptual framework to help me refine and structure my entire study.

In the next chapter, I present the research design and methodology.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

In the previous chapter I discussed literature related to the study. I also discussed the conceptual framework that underpins the study. Chapter three explains the research methods and design used in the collection and analysis of data. It starts with a discussion of the underlining paradigm and continues with the sampling procedure and an explanation of the data collection and analysis processes. The integration of data collection and data analysis based on the social constructivist paradigm is explained. The chapter concludes with a discussion of the ethical considerations that were considered throughout the course of the study. Table 3.1 provides a summary of the methods and research process of this study.

Table 3.1: Overview of the research methods and research process

PARADIGM	
Social constructivism	
RESEARCH DESIGN	
Participatory action research	
Selection of sites	Purposive sampling
Selection of participants	Purposive sampling
DATA COLLECTION	
Data collection instrument	Means of data documentation
Face-to-face semi-structured interviews with participants	Verbatim written transcript of responses given to interview questions
Classroom observation of the implementation of the indigenous play-based pedagogy	Participants' reflective journals, teachers' lesson notes, researcher's field notes and photographs
DATA ANALYSIS AND INTERPRETATION	
Thematic analysis of data generated from interviews, reflective journals, field notes and photographs	
QUALITY CRITERIA OF THE STUDY	
Credibility, transferability, dependability and confirmability	

ETHICAL CONSIDERATIONS	
Ethical consideration before data collection	Informed consent, voluntary participation, anonymity and confidentiality
Ethical consideration during data collection	Voluntary participation, trust, anonymity, safety, sensitivity and confidentiality
Ethical considerations during data processing and analysis	Anonymity and confidentiality
Ethical consideration during thesis writing and dissemination of the research	Anonymity and confidentiality

(Adapted from Van Heerden, 2011:63-64)

3.2 PARADIGM: SOCIAL CONSTRUCTIVISM

3.2.1 Meta-theoretical paradigm

My study is underlined by the social constructivist paradigm, which views reality as multiple and socially constructed (Merriam, 2009; Merten, 2010). Creswell (2014) as well as McMillan and Schumacher (2014) explain that social constructivism deals with multiple meaning-making. Creswell (2014:8) asserts that different people experience and interpret the world they live in differently, which results in “varied and multiple” meanings. Stringer (2014:75) argues that the “experiences, worldviews and cultural background” of people influence the way they interpret things they experience.

Mertens (2010:11) compares the four paradigms: post-positivism, constructivism, transformative and pragmatic in the research domain. See table 3.2 below.

Table 3.2: Basic beliefs associated with the major paradigms

Basic beliefs	Post positivism	Constructivism	Transformative	Pragmatic
Axiology (nature of ethical behaviour)	Respects privacy; informed consent; minimise harm (beneficence); justice/equal opportunity	Balanced representation of views; raise participants’ awareness; community rapport	Respect for cultural norm; beneficence is defined in terms of the promotion of human rights and increase in social justice; reciprocity	Gain knowledge in pursuit of desired ends as influenced by the researcher’s values and politics

Basic beliefs	Post positivism	Constructivism	Transformative	Pragmatic
Ontology (nature of reality)	One reality knowable within a specified level of probability	Multiple socially constructed realities	Rejects cultural relativism; recognises that various versions of reality are based on social positioning; conscious recognition of consequences of privileging versions of reality	Asserts that there is a single reality and that all individuals have their own unique interpretation of reality
Epistemology (nature of knowledge; relationship between knower and would-be known)	Objectivity is important; the researcher manipulates and observes in a dispassionate objective manner	Interactive link between participants and researcher; values made explicit; create findings	Interactive link between researcher and participants; knowledge is socially and historically situated; need to address issues of power and trust	Relationship in research is determined by what researchers deem appropriate to that particular study
Methodology (approach to systematic inquiry)	Quantitative (primarily); interventionist; decontextualised	Qualitative (primarily); hermeneutical; dialectical; contextual factors are described	Qualitative (dialogic); quantitative and mixed methods can be used; contextual and historical factors are described especially as they relate to oppression	Match methods to specific questions and purposes of research; mixed methods can be used as the researcher works back and forth between various approaches

Source: Mertens (2010:11)

On the basis of social constructivist ontology, reality is multiple and is socially constructed, with contradictory constructions expected (Patton, 2002). Social constructivism was selected as a research approach because it allowed for the construction of multiple meanings which are subjective to the particular context being studied (Creswell, 2014; Denzin & Lincoln, 2011; Lincoln & Guba 1985).

'Play', for instance, is a socially constructed phenomenon and could mean different things to different people. Stringer (2014) therefore recommends that the task of the constructivist researcher is to create an environment for people with different views and interpretations to convey a construction of their circumstances that makes sense to them. The reason for this procedure, according to Stinger (2014), is to arrive at a possible agreement.

My aim in this study was to understand multiple constructions of meaning and knowledge. This perspective demands a collaborative approach to exploring the lived experiences of the participants. Creswell (2014) suggests that social constructivist researchers must seek the complexity in the views of the participants. In order to understand how the participants in my study experience the implementation of the indigenous play-based pedagogy, I therefore explored a variety of activities the teachers engaged in within their work environment.

According to the constructivist epistemology, the researcher and the participant are "linked" in a collaborative relationship, with each influencing the other (Ritche, 2003:13). The social constructivist hence resorts to a more personal, interactive means of collecting data. In my study, I achieved this by entering into a relationship with my participants, personally interacting with them in their kindergarten learning environment. My chosen design, PAR, supports this epistemological stance.

3.2.2 Methodological paradigm

Consistent with the social constructivist paradigm, this study employed a qualitative research approach with a participatory action research design (Cohen, Manion & Morrison, 2011; Creswell, 2014; Lambert 2012; Vos, Strydom, Fouché, & Delport, 2011) to investigate the indigenous play-based pedagogical practices of eight kindergarten teachers. Merriam (2009:14) asserts that the "key concern of a qualitative research is understanding the phenomenon of interest from the perspective of the participants, not the researcher's."

The qualitative research approach was used because it provided in-depth understanding and rich descriptions of the views, experiences and practices of the kindergarten teachers as they engaged in their classroom practices. The qualitative

research approach allowed me to understand how the eight kindergarten teachers coped within their specific classroom contexts and what they thought about their unique circumstances by listening to their voices and observing their classroom practices (Yin, 2016).

According to Creswell (2014), the goal of the social constructivist is to depend on the views of the participants as much as possible. Hence, meaning results from interaction with the participant. The social constructivist researcher locates himself or herself with the participants in order to understand the social and historical background of the participants. Therefore, in order for me to understand the cultural and historical contexts within which the participants live and work, I focused on the process of interaction with participants on a personal level within their working environment.

In accordance with social constructivism, data from various sources (semi-structured interviews, participants' reflective journals and observation field notes) collected from the kindergarten teachers was explored to create a description of multiple constructions of the implementation of the indigenous play-based pedagogy.

3.3 THE RESEARCH PROCESS

The in-depth investigation into the research question was planned systematically. The research procedure of this study was based on an ongoing process of data collection and analysis (Creswell, 2014), which involved noting, collecting and thinking about the data. Table 3.3 provides a summary of the research process.

Table 3.3: Research sequence and data collection

Research sequence	Research activity	Duration
Phase one (ethical procedures)	<p>Information meeting with participants.</p> <p>I organised an information meeting with the eight participants at each school to introduce them to the study after meeting with their head teachers to obtain permission and consent. The purpose and research design of the study were discussed. I informed the participants that their participation was voluntary. The participants had the opportunity to ask questions regarding the study. Letters of consent were given to participants (see appendix C). After the participants had agreed to participate, a date was scheduled for the first (diagnostic) interview.</p>	60 minutes meeting with participants in the last week of January
Phase two (diagnostic phase)	<p>First semi-structured individual interviews.</p> <p>The first individual semi-structured interview (see appendix D for interview guide) was conducted to find out what the kindergarten teachers already knew and were doing regarding their implementation of the kindergarten curriculum. It was also aimed at identifying their training needs. Areas covered by the questions included:</p> <ul style="list-style-type: none"> • Teachers' knowledge, beliefs and attitudes towards the KG play-based curriculum implementation • Factors that influenced how teachers used play in teaching (if any) • Teachers' pedagogical practices • Teachers' training needs 	25 minutes in early February

Research sequence	Research activity	Duration
Phase three (capacity-building workshops)	<p>Capacity-building workshops.</p> <p>Capacity-building workshops were organised to introduce participants to the indigenous play-based pedagogy. The capacity-building workshop that forms part of the indigenous play-based professional development programme (IPBPDP), followed a three-step model consisting of:</p> <ul style="list-style-type: none"> • Theory (theoretical underpinning) • Modelling • Trialling 	Six sessions: two hours, twice a week for three consecutive weeks were conducted in February
Phase four (implementation and review phase)	<p>The implementation phase progressed through three cycles. Each cycle consisted of:</p> <ul style="list-style-type: none"> • Planning • Teaching • Discussion and feedback (reflection) 	Individual teachers did at least three lessons each lasting 45 -60 minutes. The observation was done in March
Phase five (post-implementation)	<p>Second semi-structured interview, collection of the photographs and reflective journals.</p> <p>I conducted a second round of semi-structured interviews. The participants talked about their photographs and reflective journals were collected for data triangulation.</p>	25 minutes at the end of March

3.4 RESEARCH DESIGN AND METHODS

3.4.1 Participatory Action Research (PAR)

I used the participatory action research (PAR) design to collect and analyse data of the kindergarten teachers' knowledge, beliefs, attitudes and practices in different kindergarten classroom settings as they implemented the indigenous play-based pedagogy. Bhana (1999:230) asserts that PAR researchers seek to "know with others rather than about them." I chose PAR for this study firstly because it allowed me to work collaboratively with the participants to solve problems that were of concern to them. Secondly, Bhana (1999) believes that when the need for empowering participants in a research project is a prime objective, PAR is the design of choice. Einarsdottir (2014:98) agrees and further adds that the goal of PAR is to empower and support teachers to rethink and transform their practices. Bhana (1999:235) explains empowerment as the process of "raising awareness in people of their abilities and resources to mobilise for social action."

In this study, my aim was to collaborate with kindergarten teachers, relying on their abilities, expertise and experiences to provide locally available materials and indigenous Ghanaian games to design and implement an indigenous play-based professional development programme. This approach made the participants feel important, and therefore they were committed to the success of the study and willing to abide by its outcome (Bhana, 1999).

Bhana (1999) describes PAR as a cyclical process comprising three phases: definition of the problem, data collection and analysis and utilisation of results. In this study, I involved my participants in defining the research problem, designing and implementation of the study (Vanderstoep & Johnston, 2009).

According to Bhana (1999), one way to define a research problem is by involving the participants in framing the research questions. Bhana proposes a number of facilitation strategies for involving participants in defining the research problem. These include focus group discussions and personal survey. These strategies aim to allow the participants to talk about their everyday reality, in the process helping participants to understand their own context. In my study I achieved this by employing semi-structured interviews at the initial (diagnostic) phase of my study.

The focus of this interview was to afford the teachers the opportunity to understand and determine their own training needs and to share their views and experiences regarding what they already knew and were practising as far as the implementation of the play-based KG curriculum was concerned.

The second phase of Bhana's (1999) PAR model is the data collection and analysis phase. As in the problem definition phase, this second phase seeks to promote collaboration with participants. According to Bhana, participants are directly involved in the data collection and have a say in how data is collected and interpreted. In my study, the participants were actively involved in collecting data in the form of keeping reflective journals and taking photographs relating to the implementation of the indigenous play-based pedagogy. The participants also had the opportunity to explain the photographs they collated during a second semi-structured interview. In this way, the interpretation that I generated from those interviews and photographs was not my voice, but that of the participants.

The final phase of PAR, according to Bhana (1999), is the utilisation of results. This phase involves the researcher giving the participants access to and control of the research findings to participants. Participants are involved in deciding on how the findings are connected to the implementation. To this end, my participants, after the professional development programme, had the opportunity to put into practice what we had developed collaboratively. The participants decided which knowledge and skills to implement in their classrooms. I also had the opportunity to provide feedback to the participants during the post-programme interview at the end of the study.

3.5 PARTICIPANTS AND RESEARCH SITES

This study employed purposive sampling to select eight kindergarten teachers from five public kindergarten schools that were using the government-prescribed kindergarten curriculum in their settings. Initially, there were nine participants. After the first round of semi-structured interviews and the capacity-building workshops, one participant did not show interest in continuing with the subsequent phases of the data collection. I therefore decided not to include data from her first interview in the analysis. Hence I will be reporting on only eight participants. The participants were selected based on predetermined criteria that are relevant for understanding

the research questions (Creswell, 2014; Yin, 2016). I used codes to identify the participants (e.g. participant 1 = P1). Yin (2016:94) mentions that it is important to determine a set of criteria before purposively sampling participants.

The following purposive sampling criteria were applied:

- I. Participants had to be teachers with at least six years' work experience of kindergarten teaching and have either a four-year bachelor degree or a three-year Diploma in Early Childhood or Basic Education.
- II. The sample had to come from a variety of public kindergartens and teaching contexts (Yin, 2016).
- III. The teachers had to participate voluntarily.

The sample comprised eight kindergarten teachers, which is an acceptable number of participants for a participatory action research design (Creswell, 2014). This purposive sampling procedure afforded me the opportunity to select participants with a broad range of information and perspectives of indigenous play-based pedagogy (Yin, 2016). Table 3.4 provides an overview of the profile of the participants.

Table 3.4: Profile of participants

Participants	Age	Gender	Qualification	School setting
Eight kindergarten teachers	Between 38 and 57	All female (there were no male kindergarten teachers in the participating schools)	Three participants had qualifications in ECE. The rest had qualifications in basic education (through regular, distance education or sandwich programmes).	Four teachers taught in KG 1 and four taught in KG 2. Two schools were located in an area with low economic status, three in an area with a middle-income status. Three of the teachers taught in Islamic schools, five in Christian mission schools. All the teachers taught in different multicultural kindergarten schools in the Eastern Region of Ghana.

3.6 DATA COLLECTION

In accordance with a social constructivist methodology, the study employed four data collection instruments: interviews, observations, participants' reflective journals and photovoice. I chose these data collection instruments because they were considered appropriate to enable me to study how the kindergarten teachers implemented a play-based pedagogy in their classroom contexts.

According to Creswell (2014), researchers should pay attention to the advantages and disadvantages of the data collection instruments they consider using in their study and establish a protocol for each of the instruments. Table 3.5 lists the advantages and disadvantages of the data collection instruments selected for this study as well as strategies employed to strengthen the validation of the instruments.

Table 3.5: Advantages, disadvantages and enrichment of validation of the data collection instruments

Data collection instrument	Advantages of the instrument	Disadvantages of the instrument	Enrichment of validation of data collection instrument
One-on-one, face-to-face semi-structured interviews	Allows the researcher to direct the line of the conversation (Creswell, 2014:191).	The presence of the researcher might result in participants giving biased responses (Creswell, 2014). Some participants might not be expressive (Marshall & Rossman, 2016:150)	Good rapport and gentle probing for elaboration (Marshall & Rossman, 2016:151). Participants were encouraged to use their mother tongue to explain themselves whenever they wished. Multiple data collection methods and member checking of the transcripts of the interviews were used (Creswell, 2014:202; Silverman, 2014:91).
Non-participant observation	First-hand experiences with the participants; information is recorded as it happens; unusual aspects are noted during observation (Creswell, 2014:191)	Researcher might appear intrusive; researcher might make heinous discoveries that he or she might not be able to report; researcher might lack observation and recording skills (Creswell, 2014:191)	I used data from participants' photovoice, reflective journals and interviews to triangulate the data.
Documentation (participants' reflective journals)	Provides information in participants' own words; gives participants the opportunity to think through information given (Creswell, 2014:192)	Limited and incomplete information (Creswell, 2014:191)	I followed up with participants for more clarification in some instances. The use of multiple data collection methods (observation, interviews and photovoice) enabled triangulation.

Data collection instrument	Advantages of the instrument	Disadvantages of the instrument	Enrichment of validation of data collection instrument
			I provided guidelines to help the teachers to complete their reflections.
Photovoice	Allows participants to directly share their experiences and reality; captures data in a creative manner (Creswell, 2014: 192)	Might be difficult to interpret; accessibility to the public might pose a challenge; taking the photographs might be intrusive and influence participants' behavior (Creswell, 2014:192)	Participants had the opportunity to explain the photographs during an interview session. I allowed the teachers to take the photographs themselves. In this way, they only took photographs that they felt comfortable with.

Although the individual, one-on-one semi-structured interviews with participants were regarded as the main source of data, information from participants' reflective journals, photovoice and observations helped validate the findings (Nieuwenhuis, 2016). Each of the data collection instruments is described and justified below.

3.6.1 Semi-structured individual interviews

Semi-structured one-on-one interviews formed the main part of the data collection (Creswell 2014). I employed semi-structured interviews (Nieuwenhuis, 2016) to explore the research questions further and to collect data on kindergarten teachers' understanding and implementation of the indigenous play-based pedagogy. The main questions used in the interviews were derived from the research questions:

1. What prior knowledge, beliefs and attitudes do teachers have about play-based learning and how do these affect their practice?
2. How can the indigenous play-based professional development programme be used to enhance teachers' knowledge, beliefs, attitudes and practices?
3. How can changes, if any, in teachers' knowledge and delivery of the curriculum after following the programme be explained?

By employing a one-on-one interview format, I was able to explore other aspects of the teachers' play-based pedagogical practices such as: How do you use play-based pedagogy in teaching curriculum concepts? In which learning areas (subjects) do you employ play-based pedagogy? Why do you use play-based pedagogy the way you do? Besides providing an opportunity for me to explore participants' prior knowledge, beliefs, attitudes and practices regarding play-based pedagogy, one-on-one interviews also afforded me the opportunity to gather extra information such as non-verbal cues in the form of the tone of voice and gestures (Creswell, 2016).

Two semi-structured interviewing sessions of about 25 minutes were conducted with each participant to triangulate the data: one at the beginning of the data collection (pre-implementation phase) and the other towards the end (post-implementation phase). The first interview was done at the end of January/beginning of February before the professional development programme commenced. In this way, the teachers' specific training needs that emerged during this interview informed the

topics and appropriate activities designed during the capacity-building workshops to address the identified needs.

The second interviewing session took place towards the end of March, after the professional development programme, to review and evaluate the successes/shortcomings of the programme. The collection of photographs and reflective journals was used to facilitate the interview discussions. The flexibility in the semi-structured interviews afforded me the opportunity to clarify ideas, practices and thoughts demonstrated in the observations, photovoice and the reflective journals (Maree & Pietersen, 2016; McMillan & Schumacher, 2014). This information provided the avenue for me to further investigate the eight teachers' implementation of indigenous play-based pedagogy (Nieuwenhuis, 2016).

3.6.1.1 Administration of the interviews

The interviews with each kindergarten teacher were scheduled at their convenience. They were conducted in the schools' offices after school. I used a number of open-ended questions to direct the interaction and to ensure that the basic lines of enquiry were followed (Flick, 2014; Patton, 2002).

Flick (2014) and Patton (2002) identified a number of advantages of using an interview schedule. Patton, for example, notes that an interview schedule helps the interviewer to conduct a systematic interview and ensures judicious use of time in an interview situation. Flick mentioned that the interview schedule helps the researcher with the manner in which he or she facilitates the interaction.

I followed Flick's advice that the use of the guide should be flexible to allow for the inclusion of the viewpoints of the interviewee. The questions were not followed strictly, but left room to probe further depending on the responses of the participants (Teddlie & Tashakkori, 2009). Each interview was recorded and notes were taken as the interview proceeded (Creswell, 2014; Nieuwenhuis, 2016). I organised, labelled and transcribed the 16 interviews and summarised them for further analysis.

During the interviews, I refrained from interrupting the participants (Seidman, 2013). My cordial relationship with the interviewees made them feel at ease during the

interviews (Seidman, 2013). I was sensitive and did not force interviewees to answer any questions they did not want to answer (Nieuwenhuis, 2016).

3.6.2 Classroom observations

I observed the eight participants in their teaching environments to see how indigenous play-based pedagogy was being implemented in their unique school contexts. The teachers constituted the primary participants, with their learners serving as indirect participants. Stringer (2014:113) asserts that observation enables the researcher to capture and develop an understanding of the “lifeworld” of the participants as they undertake their daily activities and helps researchers to record important details of the research context of the participants.

The aim of the observations was to see how the teachers implemented the indigenous play-based pedagogy and note any issues to be clarified during the second interview. The following observation guide was used during the observation to collect data (see appendix E). Table 3.6 provides a summary of the observation schedule that was used.

Table 3.6: Observation schedule

Observation: Behaviours/ actions	Guiding questions	Field notes
Objectives of the lesson	Did the teacher tell learners about the objectives of the lesson?	
Description of the activity(ies) to be undertaken by the teacher and/or the children	What kind of activity(ies) were done during the lesson? What were the roles of the teacher and the learners? Where did the lesson take place?	
Availability of materials and resources	Were there enough materials and resources? Were the materials bought, collected from the environment or designed by the teacher and/or the learners?	
Description of observed pedagogy	Did the selected indigenous play promote imagination, thinking skills, problem solving and social interaction?	
Learners' responses	How did the learners respond to the indigenous play-based pedagogy? How did they feel, what was their attitude towards the pedagogy? Were the learners actively engaged in the lesson?	

Observation: Behaviours/ actions	Guiding questions	Field notes
Assessment procedure	How were learners assessed? Did the teacher apply the concept of “rising to the concrete”?	

The role of the researcher during observation is a continuum ranging from one who is a “complete insider” at one end to a “complete outsider” at the other end. In the middle is the “insider/outsider” (partial participant) (McMillan & Schumacher, 2014:374). According to the authors, the complete insider, unlike the complete outsider, assumes roles and gets involved in the activities of the participants. On the other hand, the complete outsider detaches himself or herself from the activities of the participant. The insider/outsider is in the middle of the continuum. He or she gets involved in the activities of the participants to some extent. Table 3.7 is a visual representation of the various positions and corresponding roles of the researcher during observation.

Table 3.7: Different positions and roles of the researcher during observation

Position	Complete insider	Insider/Outsider (partial participant)	Complete Outsider
Roles	Takes up roles and gets involved in the activities of the participants.	Involves himself or herself in the activities of the participants to some extent.	Remains detached from the activities of the participants.

Comparing the three roles (complete insider, insider/outsider and complete outsider), McMillan and Schumacher (2014:374) suggest that an insider/outsider perspective helps the researcher to create rapport with the participants. However, the authors maintain that the role of the researcher in an observation changes as the research progresses. Although I mostly took on the role of an insider/outsider where I joined in the play and learning activities of the learners (when they invited me), I occasionally played the role of a “complete outsider” where I detached myself from the activities of the participants to focus solely on observing.

One of the advantages of observation was that I had first-hand experience of the way the eight teachers implemented the indigenous play-based pedagogy (Merriam & Tisdell, 2015; Nieuwenhuis, 2016). I observed a total of 19 lessons, with each teacher teaching a minimum of two and in some cases a maximum of three lessons.

I was aware of the subjective nature of observation, hence I designed and used an observation schedule based on my research questions (Nieuwenhuis, 2016). I observed the implementation of the indigenous play-based pedagogy during arranged observation sessions at the convenience of the teachers, bearing in mind the schedules of the schools. I captured the predetermined behaviours on the observation schedule as they occurred as well as behaviours that I observed, but were not on the observation schedule in my field notebook.

The context in which the observation was conducted formed an important part of the data, as it provided the situation in which the eight teachers implemented the indigenous play-based pedagogy (Stringer, 2014). Hence I took detailed descriptive field notes (which I later expanded on) of the school context, the class size, the kind of activities and where they were carried out.

Like other data collection instruments, observation has its own disadvantages. The challenges I faced during observation were twofold. First, as much as I tried to arrive early in the classroom to locate a suitable place to sit in order not to disrupt the lessons, the learners were curious and wanted to interact with me. I did not pay much attention to them, making them gradually ignore me and focus on their activities. Second, in two of the schools where participants worked alone, they asked me to take photographs for them from time to time, which prevented me from observing other events occurring at the time.

3.6.3 Documents: Participants' reflective journals and field notes

By reviewing documents, researchers can obtain a large amount of information (Stringer, 2014). I collected documentary data from teachers' reflective journals, field notes and teachers' lesson notes. The information in the teachers' lesson notes helped to triangulate data from the observation and reflective journals.

The reflective journals that participants kept during the period of the implementation served to check the subjectivity of the researcher and for triangulating data. I provided guidelines for writing a reflective journal for the participants to assist with writing their reflections regarding their experiences, knowledge, beliefs and attitudes. (Refer to appendix M for guidelines for writing a reflective journal). The participants reflected on their lesson preparation, presentation, assessment and

learners' responses. I collected the reflective journals at the end of the implementation phase.

3.6.4 Photovoice

“Photographs provide a powerful means of presenting images of events and other phenomena” (Stringer, 2014:117). Stringer asserts that photographs possess the potential to be used in a “participatory visual method” in the form of photovoice. Consistent with the PAR design, I employed the photovoice method in my data collection. Stringer describes photovoice as a method that requires participants to describe and comment on photographs that illustrate events or contexts that they have experienced.

Several studies (Baker & Wang, 2006; Joubert, 2012; Schulze, 2007; Wang, 1999) have shown that the use of the photovoice method is advantageous. Schulze, for example, discussed how her participants experienced the photography process. Schulze noted that the approach offered the participants the opportunity to decide what was the most significant as far as their work was concerned. In the present study, in addition to using photovoice as an elicitation technique, photovoice also offered the participants the opportunity to reflect on their implementation of the indigenous play-based pedagogy in their classroom settings.

Despite the advantages of the photovoice technique, it also has some limitations. Baker and Wang (2006) reported that due to the numerous steps involved in the technique (taking photographs, writing narratives and completing a survey) only small number of the participants finished the project. The authors recommended that the researchers reduce the steps involved in employing photovoice. In view of this, in my study, the participants were only required to take photographs which were used to facilitate the interview discussion.

According to Allen (2012) and Stringer (2014), the participant-photo-generated approach allows participants to take photographs that are of interest to them. I followed this approach during the classroom implementation phase of this study. In a few cases where participants could not take photographs themselves during the lesson delivery, their partners (colleagues who also took part in the study) took the

photographs, and on few occasions, where a participant did not have a partner and asked me to take specific photographs, I did it myself (see par. 3.6.2).

Photographs were taken to show teachers' preparations before lessons (making of teaching-learning materials), teacher-learner activities and assessment activities. Participants also took photographs of learners' creations, which included objects moulded with clay or play dough, drawings and paintings. Participants also photographed learners during role-play or dramatisation of stories. The photographs were used to stimulate discussions during the second interview session. As noted by Allen (2012) and Stringer (2014), one purpose of employing a photo method, is to facilitate the discussion and to allow the participants to talk.

3.7 DATA COLLECTION STAGES AND ANALYSIS PROCESS

The data collection, was based on the following research questions:

How would an indigenous play-based professional development programme enhance teachers' knowledge, attitudes and skills for improved delivery of the curriculum?

The sub-questions derived from the main research question are:

1. What prior knowledge, beliefs and attitudes do teachers have about play-based pedagogy, and how do these affect their practice?
2. How can the indigenous play-based professional development programme be used to enhance teachers' knowledge, beliefs, attitudes and practices?
3. How can changes, if any, in teachers' knowledge and delivery of the curriculum after following the programme be explained?

All the data from the semi-structured interviews, participants' reflective journals, photovoice and observation field notes was gathered for triangulation between January and April 2017, a period of three months. Prior to the start of the data collection, ethical approval was obtained for the study from the Faculty of Education, University of Pretoria's ethics committee. A five-phase data collection design was followed:

The first phase was concerned with ethical procedures. Towards the end of January, I met with potential participants and provided them with the necessary information regarding the study. The participants signed their consent letters and agreed on convenient dates for the first semi-structured interviews.

The second phase of the data collection involved individual semi-structured interviews with each of the eight kindergarten teachers in February. I informed the teachers about the capacity-building workshops. We agreed on a convenient schedule for the workshop.

The third phase consisted of six sessions of capacity-building workshops between February and March. We discussed relevant topics in the kindergarten curriculum, and Anansi stories and other indigenous Ghanaian games were discussed and demonstrated. We also explored different strategies for implementing the indigenous play-based pedagogy.

The teachers wrote their reflections at the end of every workshop session. These reflections were not intended to be included in the analysis; they were meant to provide me with continuous feedback from the participants as the workshops progressed. I provided the participants with both oral and written information concerning the observations, participants' reflective journals and the photovoice. I provided guidelines to participants for organising their photovoice (see appendix L) and determined suitable dates for each participant for the observation.

The fourth phase consisted of observation, field notes, participants' reflective journals and photovoice and took place in March. We agreed on appropriate dates for the second individual semi-structured interviews.

The final phase, which took place at the end of March, was the second round of individual semi-structured interviews. The photographs which were used during the interviews and the reflective journals were collected after the interviews. Preliminary data analysis was done at the end of each phase. Further analysis followed afterwards.

Table 3.8 summarises the data collection phases and the analysis processes

Table 3.8: Data collection phases and data analysis processes

Data collection phase	Data collection method	Data analysis process	Time
Phase one	The first round of individual semi-structured interviews	Listening to and transcribing the interviews	February
Phase two	Workshops and participants' reflections on each session and issues identified that needed clarification were dealt with in subsequent sessions	Reading through teachers' reflections. Issues that needed to be clarified were dealt with in subsequent sessions	February
Phase three	Observation and field notes	Reading through observation and field notes	March
Phase four	The second round of individual semi-structured interviews, collection of participants' reflective journals and photographs	Transcribing interviews, reading participants' reflections and narratives on photovoice	April (Detailed thematic analysis of all data followed in May – December to answer the research questions).

From observation, participants' reflective journals and photovoice I collected a large volume of rich and varied data within a short interval of time which I systematically organised prior to the data analysis.

3.8 DATA ORGANISATION

I started organising the data by creating data labelling and indexing to help me keep track of the data I had collected from each of the participants. For example, data collected from the first interview, second interview, observation field notes and participants' reflective journals of participant 1 were labelled as P1int1, P1int2, P1RJ and P1OFN respectively. See table 3.9 below.

Table 3.9: Labelling of data from the different sources

Data from participant 1's interview 1	Data from participant 1's interview 2	Data from participant 1's reflective journal	Data from my observation field notes
P1int1	P1int2	P1RJ	P1OFN

I created separate files, both electronic and hard copy, for each participant containing the signed consent forms, photographs, documents (reflective journal and lesson notes), transcripts and audio recordings of the two semi-structured interviews, as well as my observation field notes.

After organising the data, I commenced the process of data analysis immediately by reading through the transcripts of the first interviews to get a general sense of what the data was communicating to me (Maxwell, 2013). I hand-coded every document to ensure a systematic data trail, which made it easy to track the source of the data should the need arise.

3.9 DATA ANALYSIS STRATEGIES

I adopted a thematic data analysis approach to gain insight into and to understand how the eight Ghanaian kindergarten teachers implemented the indigenous play-based pedagogy. Thematic data analysis involves probing across a data set in order to identify patterns (Braun & Clarke, 2006). For this study, I chose the constructionist perspective of thematic data analysis in order to explore the social-cultural contexts and the structural conditions within which the kindergarten teachers implemented this pedagogy (Braun & Clarke, 2006). I followed Braun and Clarke's suggestion of a six-step model of thematic analysis. Figure 3.1 shows the steps involved in Braun and Clarke's model for thematic analysis.

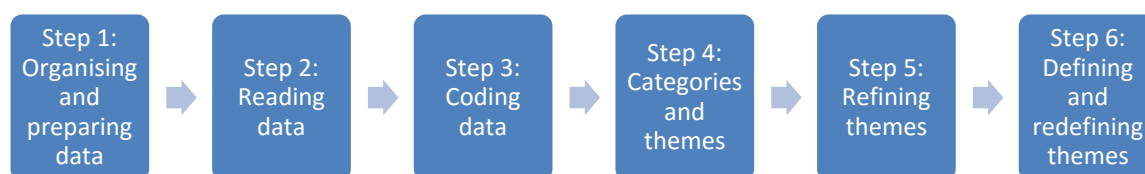


Figure 3.1: Steps involved in the thematic analysis
(Braun & Clarke, 2006)

- **Step 1**

As shown in Figure 3.1, the first step included organising and preparing data, which commenced during data collection. In this step I used my research notebook to note down my initial thoughts and feelings regarding the process. I used these notes to

continually restructure my interview schedule based on which questions needed to be probed further. I transcribed the interviews, typed the observation field notes, numbered and uploaded the photographs and created files for each participant's data sets.

- **Step 2**

After the transcription of the data, I read through the transcripts at least four times in order to familiarise myself with the data. During this step I meticulously looked out for and highlighted important statements, sentences, patterns and quotes. The ideas I took note of at this phase were later used for coding in the subsequent phase (Braun & Clarke, 2006).

- **Step 3**

During step 3, I colour-coded the ideas I had identified earlier. At the first level of coding ("open coding") I used phrases to describe similar responses across respondents, with a particular focus on which responses captured much relevant information. For example, below are extracts from two participants (P8 & P3), relating to how the capacity-building workshops influenced the way they used play to teach following the sessions. This is to illustrate how open codes were used to answer the question: How did the workshop influence the way they used indigenous play in the kindergarten classroom context?

"... I have **acquired knowledge** about how to extract concepts from the stories and this has helped to expand my lessons and children get to learn more than I planned for" (P8).

"I have **acquired knowledge** about the learning areas (subjects) to use play to teach" (P3).

From the extracts above I observed that the effect the workshop had on the participants was constructed as 'acquisition' of knowledge about using play to teach concepts to learners. This example briefly showed how I generated initial codes. I went through all the data and made sure the codes corresponded to the extracts.

- **Step 4**

After allocating all the codes, I compared them to see which of them could be grouped together (category codes) to form different groups (themes) (see appendix N for examples of data analysis strategies) (Yin, 2016). In order to combine the codes properly, I went back and forth to the data to ensure that the codes reflected what the participants were saying.

- **Step 5**

At this point I began refining the themes that emerged. I looked at how each theme was connected with another and linked them in order to form a lucid narrative. I went through every theme to see how distinct each one was and determined whether it captured an important aspect of what the participants said and did. In all, I put together three main themes, each one having three sub-themes. In chapter six, I present the themes as the major findings.

- **Step 6**

At this point I realised that I had a number of themes that captured the important aspects of what the participants said and did. I therefore started defining and redefining the themes. This process involved going back to the extracts to identify and write down the core ideas of the themes and how they linked up with each other.

In the next section I discuss the steps I took to enhance the trustworthiness of my study.

3.10 TRUSTWORTHINESS AS A QUALITY MEASURE

Trustworthiness is intended to help researchers to make sure they have thoroughly established the truth and the validity of the data and the analysis that emerged from the research process (Stringer, 2014). Lincoln and Guba (1989) note the following measures to ensure trustworthiness: credibility, transferability, dependability and confirmability.

3.10.1 Credibility

Credibility, which is sometimes referred to as internal validity, is defined as the “extent to which the research findings are believable and trustworthy and

reasonable” (Maree, 2016:373). Credibility gives the assurance that data was collected and interpreted properly and the results and subsequent conclusions reflect and represent the phenomenon that was studied (Yin, 2016). Therefore, credibility asks the following question: “Do researchers actually observe what they think they see? Do inquirers actually hear the meanings that they think they hear?” In other words, do the interpretations have common meaning to the researcher and participants? (McMillan & Schumacher, 2014:354).

In this regard, Yin (2016) recommends, as a first step, a detailed and systematic documentation of every step involved in conducting a study, beginning with the selection of the research sites, participants and data collection approaches. Yin further advises that account should be given of how these selections were made, as well as the challenges that were faced as a result and how these challenges were dealt with. In this study, therefore, I provide a detailed account of every activity that I undertook in this study. For example, in par. 3.3, I explained each phase of the data collection and the activities that were undertaken. In par. 3.10, I also discuss the limitations of the data collection instruments and the actions I took to overcome those limitations.

Creswell (2014:202); Stringer (2014:93); McMillan and Schumacher (2014:354) and Yin (2016:86) suggest other techniques for ensuring the credibility of a study. First, all four authors agree that “prolonged engagement” is one way of ensuring the credibility of a study. I consider the three months that I interacted with the participants as sufficient to establish credibility. I spent three weeks conducting capacity-building workshops for the participants and about four weeks observing their classroom practices.

Secondly, I ensured the credibility of this study by employing the triangulation strategy. I used data from different sources such as interviews, participants’ reflective journals, photographs and observation field notes (Creswell, 2014; McMillan & Schumacher, 2014). These strategies ensured that themes that emerged from the analysis are based on the viewpoints of participants from varied sources. Finally, I also employed member checking (Creswell, 2014; Stringer, 2014). I provided the initial major findings to the participants to check their accuracy

(Silverman, 2014). This strategy gave the participants the opportunity to clarify issues that they felt needed further explanation (McMillan & Schumacher, 2014).

3.10.2 Transferability (external validity)

According to Creswell (2014), qualitative generalisation (transferability) implies applying the findings of a study to other individuals, sites and places. Creswell argues that although this is not the purpose of qualitative research, transferability can be achieved to a certain degree. One strategy for ensuring transferability, according to Creswell (2014), is to keep proper records of all the research elements, such as data collection instruments. I believe my data collection instruments can be applied or modified for use in similar studies in other kindergarten settings. However, such a study would have to pay attention to the exceptionality of the initial research contexts (Yin, 2016).

Stringer (2014:94) recommends a “detailed description” of the research context, actions and proceedings that form part of the study. This provides an opportunity for others who were not part of the study to decide whether the situation described is sufficiently similar to their own to make the findings applicable to their situation. According to Stringer, this judgment shows the extent of the trust that people have that the findings could be transferred to their own situation. I believe the detailed descriptions in my study make transferability possible.

3.10.3 Dependability

Dependability, which is sometimes called reliability, refers to the degree to which people can trust that all procedures necessary for a systematic research process were observed (Maree, 2007; Stringer, 2014). Stringer, for example, suggests that a research audit that provides a comprehensive account of all the procedures that were followed provides the basis for judging the degree to which they are dependable. Hence I documented all data sources and how the data was generated. This information is available for others to verify if they wish.

Cohen, Manion and Morrison (2011:202) suggest that dependability can be achieved through “respondent validation.” This is where the researcher goes to the participants to confirm the dependability of the findings. I shared the themes that emerged from the findings with my participants for validation. Additionally, I engaged

in self-reflection throughout the research process. According to Maree (2007:298), this is a way of getting rid of any “bias” that I might bring to the study.

3.10.4 Confirmability

Confirmability and objectivity are sometimes interchangeably used to refer to measures a researcher takes to ensure that others can check that the procedures she or he claims to have followed were actually taken (Stringer, 2014:94). Stringer recommends an “audit trail” to assist others to check the “data, instruments, field notes, tales, journals” and other objects that relate to the study. To this end, I created both hard and soft copy files for each participant’s data.

3.11 ETHICAL CONSIDERATIONS

Every social science study poses ethical issues of varying degrees and importance (Hammersley & Traianou, 2012). I adhered to the ethical requirements of the Faculty of Education of the University of Pretoria in conducting this study.

3.11.1 Ethical considerations before data collection

Before the data was collected, permission to conduct the study was obtained from the New Juaben Municipal Director of Education in the Eastern Region of Ghana and the head teachers (principals) of the selected kindergarten schools. Upon receiving permission and consent from these authorities, I obtained informed consent from the teachers. In the case of the learners, the teachers explained the purpose of my presence in their classrooms to them (see appendix C).

3.11.2 Ethical considerations during data collection

When the data collection started, I explained the aim, objectives, possible benefits and the roles of the study to the participants. I assured the participants that they could opt out of the study (without any consequences) at any stage if they wished to.

I assured the participants of their, their learners’ and the school’s anonymity. I informed the participants that information that they provided me with would be kept confidential. I used codes to conceal the identities of the participants and the schools. I assured the participants that I would use their photographs and those of their learners in my thesis and other presentations only when they allowed me to.

Moreover, I assured the participants of the safety of the data collected. The participants were told that the data collected would be stored at the University of Pretoria for 15 years and destroyed afterwards as prescribed by the ethics committee. Lastly, in order not to interfere with schools' activities, workshops and interview sessions would be held after normal school hours at a site convenient to the participants.

3.11.3 Ethical considerations during data processing and analysis

In order to avoid compromising the anonymity of participants and confidentiality of the information they provided, I organised and transcribed all the interview data myself. To further enhance anonymity and confidentiality, I assigned codes to the data collected from each participant.

3.11.4 Ethical considerations during writing of the thesis and dissemination of the research

No information contained in the thesis has been fabricated, and all the results reported in it are true and reflect the data generated. As indicated, a copy of the thesis will be submitted to the University of Pretoria, which has the intellectual property right of all research conducted under its dominion. During the writing and dissemination of the thesis, anonymity and confidentiality were ensured by using codes for participants and schools. Photographs of the participants, their learners and schools used in the thesis were used with permission of the participants. In addition, I ensured that the faces of the participants and the learners cannot be identified.

3.12 MY ROLE AS A RESEARCHER

The primary goal of a researcher is to be as invisible as possible in order not to influence the outcome of his or her study (McMillan & Schumacher, 2014). Participatory action research, however, demands the active involvement of the researcher throughout the research process (Stringer, 2014:20). Therefore, I cannot claim not to be affected by the research process and my relationship with my participants (Ritche, 2003). I therefore accept my subjectivity, which may have influenced my observations and interpretation within the setting (Creswell, 2014).

Creswell (2014) states that a researcher's personal, social and cultural circumstances can influence and shape the way the researcher experiences and interprets the findings of the study. I was born, raised and educated (kindergarten through to junior high school) within the municipality where the research sites were located. Growing up, I enjoyed various indigenous Ghanaian play forms, both at home and in school. As an early childhood teacher-educator, these experiences would tend to shape my interpretation and experience of the study in a particular manner. Nonetheless, these rich childhood experiences hopefully helped me to gain a better understanding of the topic.

In order to ensure that my background experiences did not influence my perspectives on the study, I followed Creswell's (2014) recommendation to employ an independent external auditor to objectively assess the entire research project in order to enhance the overall validity of the study. I therefore shared my findings and interpretations with experts in the field for their assessment. For instance, I contacted Emeritus Professor Gilbert Onwu, who is familiar with the Ghanaian research context and also an expert on the design and implementation of professional development programmes in South Africa, to critically review various aspects of my research study. His critical questions regarding my findings helped me to reflect on my interpretation of the findings, and this further enhanced the validity of the interpretation of my findings.

The goal of participatory action research is to capture the uniqueness of human experiences rather than to generalise (Coughlan & Brydon-Miller, 2014). Nevertheless, a certain level of generalisation can be attained if, for example, participants in the research confirmed the accuracy of their contribution and if there was consistency in the observations. To this end, I carried out regular observations over an extended period of time, which enabled me to gain an in-depth understanding of the topic of my study (Creswell, 2014). I also confirmed the accuracy of my data with my participants. In this way the meaning that emerged from the data was that of the participants and not mine (Creswell, 2014). Other roles that I performed in this study included that of transcribing and analysing the interviews and other data (Maree, 2007).

3.13 CHAPTER SUMMARY

In this chapter I explained the research methods and design employed in the collection and analysis of data. It started with a discussion of the underlying paradigm and continued with the sampling procedure and an explanation of the data collection and analysis processes. The integration of data collection and data analysis based on the constructivist paradigm was explained. The trustworthiness of the study and ethical considerations were outlined. The description of limitations and challenges significant to the study were also discussed in this chapter.

In the next chapter, I will provide a detailed discussion on the design, implementation and evaluation of the indigenous play-based professional development programme.

CHAPTER 4

DEVELOPMENT OF AN INDIGENOUS PLAY-BASED PROFESSIONAL DEVELOPMENT PROGRAMME (IPBPDP)

4.1 INTRODUCTION

As is appropriate for participatory action research, the design, implementation and evaluation of an indigenous play-based professional development programme (IPBPDP) were an integral part of the study. This chapter begins with a discussion of the rationale for designing the programme. The chapter further describes how the different aspects of the different professional development models discussed in chapter two are incorporated in the development of the IPBPDP, and the various phases of the development and implementation of the programme are described in detail. The chapter concludes with my reflection on the process of developing the IPBPDP.

4.2 RATIONALE FOR THE DEVELOPMENT OF THE IPBPDP

Just as in other countries in the world, Ghanaian kindergarten teachers are expected to plan, organise and implement play-based pedagogy (CRDD, 2004; Ministry of Education, 2012b). However, the literature confirms that many early childhood teachers find it difficult to teach through play (Hyvonen, 2011; Ministry of Education, 2012b; Lord & McFarland, 2010; Rogers 2011). The decision to design the IPBPDP was based on the findings of the OPSQKEG and on my own experience as an early childhood teacher trainer. The current major challenges identified by the OPSQKEG include the following:

- Teachers' pedagogical practice typically shows a lack of understanding of how children should learn and how teachers should teach.
- The aims and rationale of the curriculum are not evident in the classroom pedagogy.
- The curriculum delivery is largely based on "rote learning" methods relating to letters and numbers. Practice is neither child centred nor activity based (Ministry of Education, 2012b:46).

The OPSQKEG further recommends in-service training of kindergarten teachers in order to equip them to implement the KG curriculum. The report suggests that the training of teachers should be focused on a definite pedagogy (play-based) that employs thematic and integrated approaches to teaching, with a focus on the holistic development of the learners. The pedagogy, according to OPSQKEG, must be culturally relevant, with an emphasis on respect for the culture and heritage of Ghanaians. In this regard, the OPSQKEG recommends that KG teachers should be equipped with competencies that will enable them to use locally available resources and materials to achieve learning objectives.

The IPBPDP was therefore aimed at addressing the issue of kindergarten teachers' inability to systematically implement a play-based pedagogy to deliver the KG curriculum, which would solve part of the problems facing KG education in Ghana as regards the implementation of the curriculum.

4.3 THEORETICAL PERSPECTIVES THAT UNDERLINE THE DEVELOPMENT OF THE IPBPDP

To develop the IPBPDP, I reviewed literature and research studies on different models of professional development programmes that were aimed at equipping early childhood teachers with relevant competencies for implementing the early childhood curriculum. The purpose of including these models (see par. 2.12) was to adapt relevant concepts and ideas into developing the IPBPDP. In Table 4.1, I summarise how different aspects of the different professional models were integrated into the various phases of the development of the IPBPDP.

Table 4.1: Ideas and concepts integrated into the IPBPDP

Main ideas and concepts (theories)	Phase of the IPBPDP
Prior knowledge and needs identification (Diamond & Powell, 2011; Einarsdottir, 2014)	Phase one (diagnostic): Pre-programme interviews Designed to understand teachers' prior knowledge, beliefs, attitudes and practices of a play-based pedagogy and consequently, teachers' training needs.
Capacity building (Einarsdottir, 2014; Kriek & Grayson, 2009; Onwu & Mogari, 2004)	Phase two: Capacity building Six workshop sessions

Main ideas and concepts (theories)	Phase of the IPBPDP
	Structured to give teachers practical and theoretical experience intended to enhance teachers' knowledge, beliefs of and attitudes towards a play-based pedagogy.
Implementation (Einarsdottir, 2014; Onwu & Mogari, 2004)	Phase three: Classroom implementation Aimed at giving teachers the opportunity to put their new knowledge and skills into practice in the actual classroom and receive feedback for further improved implementation.
Evaluation and reflection (Angadi, 2014; Guyskey, 2000)	Phase four: Post-implementation (review and feedback) Designed to explore the effectiveness and challenges associated with the IPBPDP.

Each of the four phases identified in Table 4.1 above is further discussed in subsequent sections.

4.4 DEVELOPING THE IPBPDP

The main objective of the IPBPDP was to employ Ghanaian Anansi stories (folk tales) and other Ghanaian indigenous games such as Pilolo (running game), Nana wo ho (visual-memory game) and bankyima kakro (stone-passing game) to equip kindergarten teachers with the skills, knowledge and attitudes needed to implement the kindergarten curriculum. (Refer to par. 2.8 for a detailed discussion on Ghanaian indigenous Anansi stories and selected games). The use of indigenous Ghanaian Anansi stories and games provides both teachers and learners with familiar social-cultural contexts within which to implement the kindergarten play-based curriculum. The programme specifically aimed to train kindergarten teachers in using locally available human and material resources for promoting kindergarten teaching and learning and the holistic development of the kindergarten child.

The programme was developed using a participatory action research approach that involved the participation of eight kindergarten teachers. The development of the programme progressed through two phases, namely diagnosis and capacity building. These were followed by an implementation and a post-implementation

phase. Figure 4.1 is a diagrammatic representation of the development of the IPBPDP.

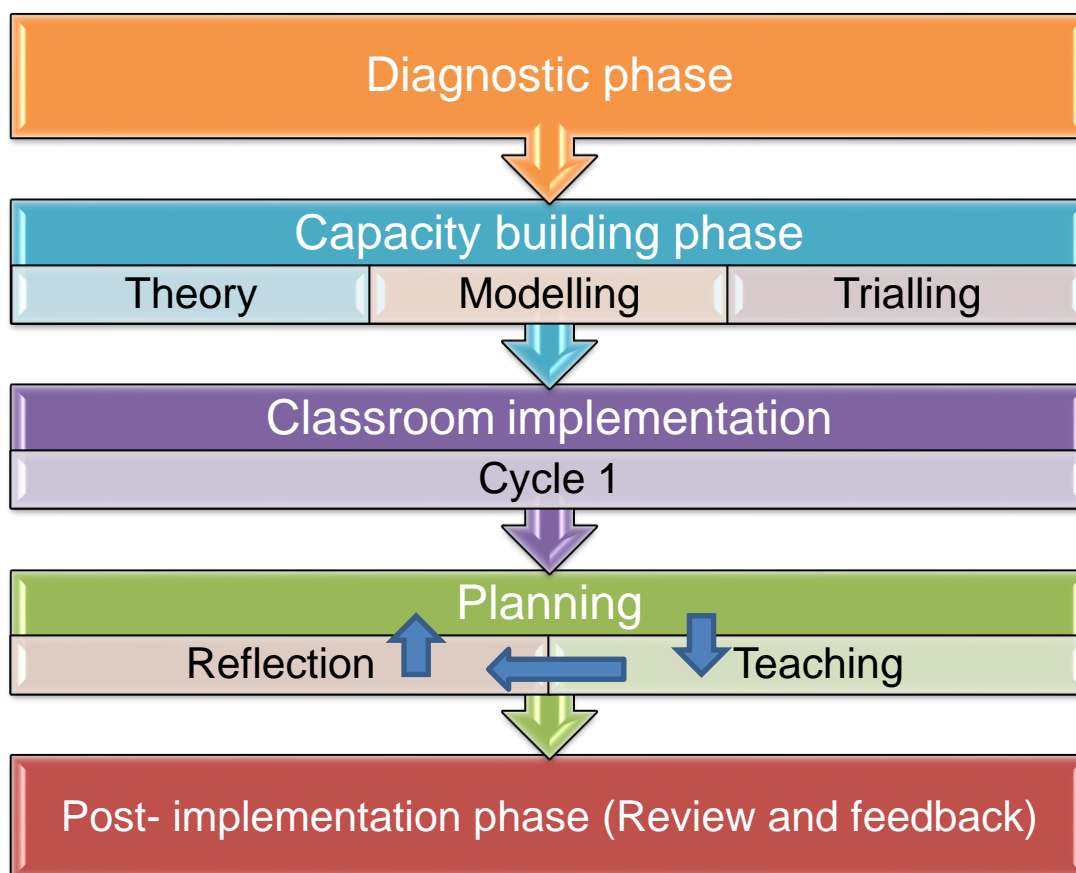


Figure 4.1: A diagrammatic representation of the development of the IPBPDP

Table 4.2 briefly lists the main activities that were undertaken during each of the phases of developing the IPBPDP.

Table 4.2: Summary of the main activities of the phases of developing the programme

Phase	Main activities
1. Diagnostic	Semi-structured one-on-one interviews with participants, aimed at finding out teachers' knowledge, beliefs and attitudes towards play-based pedagogy prior to their introduction to the IPBPDP. The findings inform the activities of the subsequent phases of the IPBPDP.
2. Capacity building	Capacity-building workshops to: <ul style="list-style-type: none"> discuss the theoretical underpinning of the programme (theory);

Phase	Main activities
	<ul style="list-style-type: none"> • demonstrate to the teachers how to implement an indigenous play-based pedagogy in their classrooms (modelling); and • practice what they had learnt during the workshop (trailing).
3. Classroom implementation	<ul style="list-style-type: none"> • I observed indigenous play-based lessons that the teachers presented in their classrooms and made field notes. • The teachers planned, taught and reflected on each lesson. • The teachers took photographs of their activities and those of their learners.
4. Post-implementation	<ul style="list-style-type: none"> • Semi-structured interviews with the participants during which I collected the reflective journals and photovoice.

4.4.1 The diagnostic phase of the IPBPD (prior knowledge and identification of training needs)

The diagnostic phase was used to determine teachers' prior knowledge of the play-based pedagogy and the principles that inform its implementation in the context of the Ghanaian kindergarten curriculum. I used interview schedules, first to gain some insight into the teachers' knowledge, beliefs and attitudes about play-based pedagogy and its use for the holistic development of the kindergarten child. Secondly, to explore their repertoire of childhood play which could be used to design an indigenous play-based professional development programme. The question "What prior knowledge, beliefs and attitudes do teachers have about play-based pedagogy and how do these affect their practice?" was explored.

The overarching finding from the diagnostic phase (pre-programme) interview revealed that the teachers had diverse views about what play-based pedagogy meant, and their description of what a play-based pedagogy entails in practice was consistent with the kind of training they received during their initial teacher preparation. It was evident that the teachers who had qualifications in early childhood education (ECE) had some training in play-based pedagogy, except that the teachers claimed their training was not in-depth and so they were unable to implement a play-based pedagogy in the classroom. On the other hand, those who had a basic education qualification did not agree on the effectiveness of the kind of training they had received; some claimed they had not had any training on play-

based pedagogy at all. Only one teacher with a basic education qualification claimed she had some training in play-based pedagogy, however, her description of how she implemented play-based pedagogy revealed that she only used play as a way of getting children focused in lessons instead of using play as the main context for delivering the KG curriculum. The findings further showed that all the teachers had experienced playing as children and were favourably disposed to the implementation of the IPBP if they received training in how to employ it in the KG classroom context. The findings from this interview provided the background for designing activities for the capacity-building workshop in the next phase of the IPBPDP (see par. 5.3 for a detailed discussion of the findings of the diagnostic (pre-programme) phase).

4.4.2 The capacity building phase

The design phase involved various stages aimed at exploring ways in which Anansi stories and various Ghanaian indigenous games, identified by the teachers themselves, could be used within the framework of the play-based programme. Several capacity-building workshop sessions were organised around each of the stages:

- The first stage (*theory*) focused on introducing the principles underlining the indigenous play-based pedagogy to the teachers.
- The second stage (*modelling*) consisted of the application of the principles discussed in the first phase to model an indigenous play-based teaching for teachers by me as the facilitator.
- The final stage (*trailing*) involved the teachers coming up with different Anansi stories and a variety of indigenous Ghanaian games that could be used in implementing the KG curriculum. The teachers designed play materials and appropriate teaching approaches. Opportunities were provided for the teachers to work in groups demonstrating a typical indigenous play-based lesson for feedback purposes. Details of the activities of each of these stages are as follows:

4.4.2.1 The first stage: Theory

The first set of workshop sessions (two) was used to introduce the participating teachers to the terminology, concepts, principles and related skills of the indigenous play-based pedagogy and its underlining theoretical perspective (Onwu & Mogari, 2004). This curriculum implementation approach was used by Onwu and Mogari in the implementation of the outcome-based education curriculum in South Africa (see par. 2.12.3). The first two sessions were deemed critical because they dealt with matters such as what the teachers needed to know and/or change in terms of knowledge, attitudes and practice. As discussed in par. 2.14.3, the development of the programme was guided by a number of cultural-historical theories of play, for example Göncü and Tuermer's (2007:160) theorisation of play as a "cultural expression" and Fleer's (2010) conceptual play theory. The conceptual play theory employs several concepts; those which are relevant to this study and how they were used in the study are briefly discussed here (see par. 2.14.1 for a detailed discussion).

- **Creation of an imaginary situation**

According to Fleer (2013), the creation of an imaginary situation is the most relevant element in all cultural-historical theories. In this study, Anansi stories provided the frame for creating the imaginary situations. In the imaginary situations children gave new meaning to objects and used meta-communicative language to make their thinking clear. The role of the teacher here was to provide the appropriate vocabulary and a variety of materials for the children to expand their play and to facilitate their learning of intended and other concepts.

- **The system of concepts**

The conceptual play theory emphasises the need for teachers to teach concepts as an integrated whole. The system of concepts allows teachers to guide learners to identify links between related concepts and learning them as a whole (Fleer, 2012). In the workshop, I taught teachers how to teach curriculum content thematically by helping learners to identify the links between concepts. Family is a good example of a system of concepts; it includes the concepts of parents, siblings, grandparents and cousins. The way these concepts interact with each other is what is called a system of concepts. The system of concepts is important because the KG

curriculum as it is (separating curriculum contents into learning areas such as numeracy, literacy and environmental studies) does not lend itself to thematic teaching.

- **Theoretical knowledge**

Theoretical thinking focuses on how children can be empowered to think with a system of concepts. According to Fler, children's activities in play are more holistic, and that makes it possible for children to develop theoretical thinking. During the workshop session, teachers were encouraged to engage in play activities that will help children to think in terms of a system of concepts. For example, when children think of a family, they do not only consider individual members, but also how the members are related to each other.

- **Rising to the concrete**

Modelling involves the provision of readily available resources for learners to playfully (and informally) represent their thinking in the form of drawings, paintings, collage and construction of objects (Davydov, 2008 cited in Fler 2012). During the workshop, the teachers were encouraged to provide learners with resources such as clay, play dough and cardboard with which learners could mould and construct objects, characters and concepts they learned during their play.

The following principles were derived from the conceptual play theory and applied in the design and implementation of the IPBP:

- I. Using Anansi stories to create imaginary situations (in which the concepts to be taught are embedded) to teach curriculum content with fun and to promote learning and development.
- II. Using multiple play-based approaches (such as role play, dramatisation, informal conversation, retelling of stories, moulding and drawing) that promote active child participation in exploring curriculum content.
- III. Being open to and supportive of children's initiative, creativity and generation of ideas/construction of knowledge and taking part in children's play to co-construct knowledge with learners.
- IV. Receiving support from the school and the community (other colleagues, older learners, parents and other elderly community and family members).

4.4.2.2 The second stage: Modelling

In this stage, I applied the principles discussed above to demonstrate teaching approaches to participating teachers to increase their knowledge-base of child-centred teaching approaches and skills. I modelled the teaching methods and activities that they were supposed to use in their actual classroom to them in the following three steps.

- **Lesson planning:** I showed my lesson plan to teachers and discussed my selected topic with them. I shared my lesson objectives with the teachers and made them understand that the intended lesson objectives determined the story I had selected. I showed my teaching-learning materials to teachers and explained why I had selected those materials.
- **Teaching:** In order to demonstrate a real kindergarten classroom learning situation, I asked teachers to act as potential kindergarten learners. Having asked them to sit in a semi-circle formation, I sat in front of them. I then narrated my selected story with appropriate gestures, pausing from time to time and asked the 'class' to comment, ask questions and to share their feelings regarding the story. At the end of the story, I divided the 'class' into three groups of three and assigned different activity-based tasks to them. The tasks were aimed at giving the teachers the opportunity to put into practice the principles that underline the IPBP (creating imaginary situations, system of concepts, rising to the concrete, creativity, problem-solving and promotion of holistic development) which they would be exploring with their learners in the classroom situation. Each group completed and presented their tasks as best as kindergarten learners could do.
- **Discussion and feedback (reflection):** At the end of my demonstration (model lesson), I gave teachers the opportunity to comment and ask questions regarding aspects of the lesson that needed clarification. I also asked teachers if there were alternative activities, materials and approaches they could use to deliver the same lesson differently. This discussion gave teachers the opportunity to brainstorm ideas on creative means of delivering an indigenous play-based lesson.

During the modelling phase the teachers learned first-hand, under my guidance, how the IPBP empowers learners to generate their own ideas and how flexible the

pedagogy is. The activities I assigned to the teachers were aimed at teaching and developing the skills of creativity (in other words, teachers should cultivate the ability to consider other alternatives) to use appropriate Ghanaian indigenous games to help learners develop their imagination and learn curriculum content; to encourage teachers to be open-minded to accommodate ideas that children generate, and to help teachers to use different questioning techniques for diagnosing any learning difficulties and for eliciting children's ideas.

Below are the story and the activity-based tasks that teachers undertook during the modelling phase. I used this story as the model of the IPBP lesson, emphasising the need for the teachers to be creative and open to learners' contributions in the classroom. This story and the activities were used in the workshop to give teachers a lesson in selecting a story and design appropriate tasks and materials. The story contains themes such as family, occupation, death and pretence. Such a story would generally not be appropriate for kindergarten children (unless the teacher selected it to deal with a specific incident). I deliberately selected this story to spark an intellectual discussion among the teachers about the selection of social-culturally appropriate Anansi stories for their lessons in the Ghanaian KG context. This discussion was to draw teachers' attention to the need to reflect on and make careful decisions about the suitability of stories to include in their lessons with their learners.

The story: Anansi lies to his family

Once upon a time, there lived Anansi and his family. The name of Anansi's wife was Aso. Anansi and Aso had a son called Ntikuma. The family lived happily in a village. All the villagers were farmers and hunters. Anansi and his family were farmers too. They had a very large farm. The family planted yams, plantain and cassava and vegetables such as peppers and tomatoes. This year, Anansi's family worked very hard. Their crops grew well.

During the year, when the crops were getting ready to ripen, Anansi told his family that he was about to die. He told his wife and son to bury him with his cooking pots on his farm. He told them never to go to the farm once he was buried. The wife and son were very sad. But they wanted to carry out Anansi's wishes.

A few days after Anansi was buried, a hunter from the village came to Anansi's family house. He had observed that some of the crops were missing from the farm. He thought that somebody was stealing from the farm. So, Aso and Ntikumah came up with a plan to catch the person. The mother and son made a wooden statue in the form of a man and put sticky glue all over it and placed it right in the middle of the farm.

Later that night, Anansi came out of his coffin and as usual went quietly to dig up some tubers of yam to prepare fufu. While pounding the fufu he sang to himself a song that goes like this:

“Aso and son are naive, how is it possible to bury a person going to the land of the spirit with mortar and pestle? I will pound and eat oooooo. Aso and son are naive!” Anansi would keep singing until he finished pounding the fufu.

One day, when he got out of his coffin, he saw the wooden statue. Anansi thought it was a human being who came to steal from him. He shouted: “Who is that?” There was no response. Anansi got closer to the statue and asked again “Who are you?” No reply came from the statue. Anansi became angry. He wanted to teach the person a lesson. He moved forward and slapped the statue with the left hand. Anansi’s left hand got stuck to the statue. He shouted again: “If you don’t let me go I am going to slap you with my right hand”. Anansi slapped the statue with the right hand. And again, his hand got stuck. He then continued with the left leg, the right leg, the head and the abdomen. Finally, his entire body got stuck to the statue. No matter how hard Anansi tried, he could not free himself from the statue.

The next morning the entire village heard about the news and went to see things for themselves. When they managed to free Anansi from the statue, he was so ashamed of himself that he ran and hid in the crevices of the walls of his house.

I designed the following hands-on, activity-based tasks for each of the three groups. In Table 4.3, I present the tasks for each group, after which I discuss the responses of only group one. I include the responses of group two and three in appendix K.

Table 4.3: Group tasks based on the Anansi story

Group 1
<p>Task 1: Your group is responsible for meeting Anansi’s final wishes. You are required to organise the utensils and other materials that will be included in the coffin to bury Anansi with. You may collect some materials and utensils from the play-box provided. You may also look around the compound and collect items you may deem relevant. I have also provided play dough for you; you may mould some of the items if necessary.</p> <p>Task 2: Which aspect(s) of development did this task promote as you engaged in it?</p> <p>Task 3: Which concepts were evident in the activities you engaged in?</p> <p>Task 4: Examine the concepts identified and mention the learning areas integrated in the story.</p>
Group 2
<p>Task 1: Aso and the son have been informed that someone has been stealing from their farm. The family is contemplating a strategy to catch the thief. With the materials and resources in and around the environment, design three strategies that you will suggest to Aso and Ntikuma to help them catch the thief.</p> <p>Task 2: Which aspect(s) of development did this task promote as you engaged in it?</p>

Task 3: Which concepts were evident in the activities you engaged in?
Task 4: Examine the concepts identified and mention the learning areas integrated in the story
Group 3
Task 1: As we heard in the story, Anansi is dead and we need to bury him. With the materials provided in the play-box and others that you deem necessary, construct a coffin for the burial of Anansi.
Task 2: Which aspect(s) of development did this task promote as you engaged in it?
Task 3: Which concepts were evident in the activities you engaged in?
Task 4: Examine the concepts identified and mention the learning areas integrated in the story.

Discussion of the responses from group one

The tasks were designed around the Anansi story that I narrated to the teachers. By completing each of the tasks, the teachers acquired knowledge, skills and attitudes relevant for implementing an indigenous play-based pedagogy in their classroom contexts.

Task one: Task one required the group to use play dough and clay to mould different household utensils for Anansi. This activity allowed the teachers to play with different textures, colours and shapes. The teachers also had the opportunity to explore their immediate environment to collect materials around them or from a play-box I provided. The provision of a play box (a box with different materials and props) gave the teachers ideas on how to collect and keep materials for use in the classroom. I observed that by the end of the workshop section, more than half the teachers had created their own play-boxes which they used in their classrooms during the implementation phase.

By carrying out this activity, the teachers make decisions about alternative sources of identifying and designing appropriate materials for their lessons. Photograph 4.1 shows some of the materials and utensils the group organised and created. The group used play-dough to mould knives for Anansi to harvest the yams, a pot to cook the yam in, a mortar and pestle for pounding the boiled yam (fufu) and a plate to eat from. The teachers thought Anansi would need pieces of firewood to make fire, so they improvised with drinking straws they collected from the school compound.



Photograph 4.1: Items the teachers made and collected

Task two: For the second task, the teachers were asked to think about the domains of development that could be promoted through the activities that they engaged in. This task was important because in the actual classroom teachers would have to design tasks and activities that could promote children’s development in all the different domains (physical, social, emotional, language and psycho-social) to reflect the general goals of the Ghanaian KG curriculum. The group’s answers included “fine-motor, hand-eye coordination, social and thinking skills.” According to the teachers, fine motor skills and hand-eye coordination are promoted through moulding with play dough and clay. They believed these skills were particularly important for formal school work, where children would need to do a lot of writing.

Task three: This task required the teachers to identify concepts in the KG curriculum that were evident in the activities they performed. The following were their answers: shapes, colours, textures, comparing sizes and comparing weight. The purpose of this activity was to allow the teachers to make the link between a selected Anansi story, activities and the KG curriculum concepts. The teachers learned in ‘reverse order’, i.e. storyline, tasks (activities) and concepts. In the actual classroom situation, the teacher would already have a topic (concept) such as shape, colour or texture. The teacher would then have to select a story that could help in teaching the concepts and then design activities through which the concepts could be learned.

Task four: According to the Ghanaian KG curriculum, learning should be presented to young children as a whole. The curriculum therefore requires teachers to employ

an integrated approach to teaching in the KG. Hence, I designed task four to make teachers think about possible ways of integrating learning in the KG through the implementation of the IPBP. The teachers realised that there were aspects of numeracy (shapes), literacy (listening to the story), environmental studies (family), physical education (fine motor development), creative arts (moulding) and music and dance (singing).

4.4.2.3 The third stage: Trialling

This stage involved the teachers themselves coming up with several Anansi stories and games that they played as children. They were given the opportunity to take leading roles in discussing and demonstrating among themselves how the different Ghanaian indigenous games could be used to teach some of the concepts in the curriculum. For example, all the teachers took turns to tell Anansi stories (and to demonstrate other indigenous games such as ampe, 'the jumping game') which they remembered from their childhood as narrated to them by their parents or elderly family members. At the end of the story, the teachers then sat in small groups of three to devise ways of using the Anansi story as a storyline to develop a lesson plan for teaching the concepts that they identified in the KG curriculum. The teachers were given the opportunity to familiarise themselves with designing and using locally available materials and resources for the IPBP implementation. The participants worked together in their small groups, discussing, sharing and explaining their ideas till they reached consensus. This process introduced the participants to the "culture of reflective planfulness" (Onwu & Mogari, 2004:166). Photograph 4.2, Photograph 4.3 and Photograph 4.4 show participants demonstrating some indigenous childhood play.



Photograph 4.2: Ampe



Photograph 4.3: Merepe kwan ako (I want to pass)

Ampe and Merepe kwan ako are both physical games which need to be played outdoors. Considering that almost all public schools in Ghana have large outdoor areas covered with shady trees, these games could easily be used for implementing the KG curriculum.



Photograph 4.4: Bankyema kakro (stone passing)

In Photograph 4.4 the teachers are playing Bankyema kakro, in which each player has a small stone and passes it to the person on her right. The rhythmic movement is accompanied by a song. Each player must keep up the pace and make sure she has only one stone in her hands at any time in the game. For this game all the children need is stones picked up from the school compound (Bayeck, 2018).

4.4.3 Classroom implementation phase (Implementation)

In the implementation phase, the eight teachers employed Anansi stories and other indigenous games such as Nana wo ho and Pilolo (refer to par. 2.8 for descriptions of the different indigenous games) to implement the KG curriculum. In three of the five schools that were used for the study, teachers worked in pairs (although each of the teachers had her own kindergarten class). The remaining two schools had only one teacher each and they worked on their own. The paired teachers worked collaboratively; they planned their lessons together and supported each other to facilitate indigenous-play-based lessons. Each of the teachers took a turn to teach while the other observed and provided constructive feedback aimed at improving subsequent lessons. I observed that the first set of teachers to reach a level close to the ideal implementation was one of the pairs. This could be because of the support they gave each other.

Each of the teachers taught at least two lessons. The first lesson (cycle) was aimed at giving the teachers the opportunity to get a feel of what an indigenous play-based pedagogy entails. During the first lesson, which was the first cycle of implementation, I focused primarily on how the teachers applied the principles (creating an imaginary situation, thematic teaching, flexibility and openness to children's generation of ideas) and concepts of IPBP as evident in their lesson plans, teaching (introduction, presentation and assessment) and reflection during the post-lesson discussion and feedback session. At the end of each lesson I provided feedback and suggestions to the teachers to improve aspects of the lesson that needed improvement.

The second and third cycles were aimed at assessing the progressive improvement and refinement of the implementation of the IPBP. During this stage I used an observation schedule to assess teachers' performance (see appendix B for the observation schedule). My focus was on how the teachers planned and delivered the KG curriculum through the indigenous play-based pedagogy. By the end of the second cycle, only two teachers needed help to move on to the third cycle to consolidate their knowledge, skills and attitudes.

Each cycle of classroom implementation involved three stages:

- Planning (pre-lesson)
- Teaching (lesson delivery)
- Reflection (post-lesson feedback)

Overall, I observed between two to three lessons for each teacher. In total, I observed 19 lessons and made field notes (see the next session for a sample lesson that I observed and an explanation of the three stages of implementation.

4.4.3.1 Integrating conceptual play with an Anansi story

As indicated in par. 1.4.1, the KG curriculum states that kindergarten teaching and learning must aim at developing skills such as manipulation, perseverance and self-confidence (among others) in learners (CRDD, 2004). The OPSQKEG therefore suggested “a new pedagogy” that is based on Ghanaian indigenous knowledge (Ministry of Education, 2012b:49), which is what the IPBPDP sets out to achieve.

- **Planning (pre-lesson)**

This lesson was presented by Participant 6 (P6). She was 41 years old, had 12 years of kindergarten teaching experience and a bachelor’s degree in basic education. She had a class size of 38 KG 2 learners with an average age of five years. The classroom was rectangular and heavily crowded, with one door and two windows on the same side. The position of the windows did not allow for proper ventilation in the room, which made the room uncomfortably during hot sunny afternoons. Like most public kindergarten classrooms in Ghana, she had an assistant.

The lesson was a creative art lesson, and the topic for the day was “Parts of the body.” The main objective for the lesson, according to the KG curriculum, was that “*by the end of the lesson the learner will be able to observe and name any three parts of the body.*” (The teacher wrote two separate lesson plans for the lesson. The first one in Table 4.4 is the lesson structure prescribed in the KG curriculum. Table 4.5 was formulated by me and the teachers during the development of IPBPDP, which emphasises integration and thematic teaching). See Table 4.4 and Table 4.5 for her lesson plans.

Table 4.4: Lesson plan structure according to the KG curriculum

Subject: Creative Activities						
Day/Duration	Topic/sub-topic	Objective/RPK	Teacher-learner activities	Teaching learning materials	Core point	Evaluation
Monday 13-03-2017 Duration: 30 minutes	Topic: Drawing and colouring Sub-topic: Parts of the body	By the end of the lesson, the pupil (learner) will be able to observe and name any three parts of the body. RPK Pupils have been reciting rhymes about the body	Introduction Pupils recite a rhyme related to the topic Presentation Activity 1: Narrate an Anansi story about the parts of the body. Show the pictures to the pupils while narrating the story. Activity 2: Discuss the story with the pupils and ask them questions. Activity 3: Group the pupils into groups of four and let each pupil mould one character each. Consolidation: Let the pupils display their work on their tables for appreciation	Play dough Pictures (improvised television)	Observation skills Self- confidence and expression	Group pupils and let them mould the characters in the story

Reference: Curriculum for KG Page 119

Table 4.5: Lesson plan structure according to an IPBP lesson written by P6

Activity	Concepts	Integrated learning areas	Aspects of development promoted	Moral lessons
(Teacher) narrates the story of the three friends as learners listen	Shapes Colours Names of the parts of the body Sizes Animals in the home Safety in the home	Creative activities Numeracy Music and dance Environmental studies Language and literacy Physical development	Listening skills Imagination Singing Dancing Comparison	We should not be greedy. We must be careful when handling sharp objects. We should accept people just as they are.
Discussing the story	(Same as during narration of the story)	Language and literacy Environmental studies	Self-confidence and expression Taking turns Questioning and answering skills	
Learners moulding characters in the story	Shapes Colours Texture	Language and literacy Numeracy	Fine motor skills Gross motor skills Eye-hand coordination Creativity Imagination.	

Teaching (Lesson delivery phase)

This phase consists of three stages: the introduction, presentation (activities) and assessment. I will discuss how each of the stages integrates with the conceptual play.

Introduction: The introduction stage is designed to arouse the learners' interest and curiosity in the topic. Kindergarten teachers usually use strategies such as questioning, demonstrations, singing and rhyme recitation to explore children's relevant previous knowledge (RPK) and to determine whether the children had any "misconceptions" regarding the topic (Desouza, 2017:345).

To introduce this lesson, the teacher (P6) asked the learners to recite a rhyme about the parts of the body.

Teacher: "We are going to say a rhyme about our body."

Children: Excitedly stood up and started saying the rhyme, "My head, my shoulders, my knees and toes," each time touching their head, shoulders, knees and toes.

The teacher showed the 'television' she had made from a cardboard to the learners, revealing some of the pictures. The teacher asked the children what they thought they were going to learn about. The children started guessing based on the pictures they saw.

Child 1: human being

Child 2: pawpaw tree

To move to the next stage of the lesson, the teacher told the children: "Today we are going to learn about the parts of the body. Before then, I am going to tell you a very interesting Anansi story about three friends."

Presentation: Activity 1. The teacher narrated the story about the three friends in Twi (the medium of instruction in that school) to the children, accompanied by the 'television' she had constructed. The 'television' was made by cutting out one side of a square cardboard. The opened side was covered with plain plastic material. The teacher rolled the stream of pictures based on the story around two wooden

rods. As she told the story, she turned the rods, which served as handles, revealing the pictures one at a time. (Refer to Photograph 4.5 for the photo collage of the story).

The children watched the ‘television’ excitedly as the story unfolded. The teacher paused from time to time to ask the children to comment on the pictures; describing the characters with emphasis on the names and sizes of the body parts (heads, legs and abdomen). The learners also talked about the colours of the clothes that the characters wore. The teacher also paused for a song about a pawpaw. The children stood up and sang and danced. Below is the story that the teacher narrated.

The story of three friends

Once upon a time, there were three friends. One had an extremely big head and he was called Tikerengerenn. Efuduhweduhwe had a very big abdomen and the last was called Nankonhwea because of his tiny legs. One day, the three friends decided to go to search for fruits in the bush. They came across a pawpaw tree full of ripe fruit. Neither Efudutwedutwe nor Nankonhwea was willing to climb the tree. Efudutwedutwe lamented that he risked bursting his abdomen if he tried climbing the tree. Like Efudutwedutwe, Nankonhwea also complained he might break his tiny legs if he dared to climb the tree. Reluctantly, Tikerengerenn climbed the tree. He picked several pawpaws, but each time he threw one down Efudutwedutwe ate it. When he picked the last one, he decided to look down to make sure Efudutwedutwe didn't eat that one. Just as he tried to look down, he lost his balance and fell heavily to the ground. Efudutwedutwe couldn't help laughing. He laughed and laughed till his stomach burst. Nankonhwea decided to run home to inform their families about what happened. On the way, his leg got stuck in an anthole and he broke his leg. There was a fowl nearby, she started laughing at the ordeal of Nankonhwea. The hen laughed so hard that tears came out of her eyes. The hen put her hands in her pocket for a handkerchief to wipe the tears; but instead of a handkerchief, she brought out a blade by mistake. The hen cut her beak and started bleeding profusely.

The photo collage below summarises how the story progressed with the use of the ‘television’.





Photograph 4.5: Photo collage of the story

Photograph 4.5 is a photo collage showing how the story unfolded. The pictures appear on the 'television' to complement the story as the teacher narrated it. In the first picture 'Bighead' climbs the tree to pick the fruits. In the second picture he falls. The third picture shows 'Tiny Legs' running home to report the incident. The fourth picture shows a hen bleeding.

Activity 2: The teacher asked questions to engage the children in discussing the Anansi story around concepts such as friendship, fruit, colours, shapes, sizes and comparisons. The teacher also asked the learners to say what moral lessons they learnt from the story. Examples are below:

Teacher: "What is the colour of Nankonhwea's shirt?"

Child 1: "It is red."

Teacher: "Why do you think Efudutwedutwe has such a big abdomen?"

Child 1: "Because he likes food too much."

Child 2: "Because he does not share his food with anybody."

The teacher took a long time discussing the moral lessons of the story. Each child was willing to share their learned lessons from the story (Arko-Achemfuor, 2013).

Activity 3: This activity was intended to give the learners a hands-on task through which they learned more and understood the intended concepts (parts of the body). The teacher gave the children play dough of assorted colours, broomsticks and plant seeds which she had collected from the school compound. The teacher put the children in groups and asked them to mould their favourite characters in the Anansi story. The teacher thought that as the children interacted with the materials and with

each other, they would learn concepts such as colours, comparison and sizes; and develop process and attitude skills such as observation, identification, concentration and cooperation. This task also gave children the opportunity to make decisions, test their ideas and try alternative ways of doing things. The children made decisions regarding their favourite characters and the diverse ways of combining the colours to create their characters. As the children moulded the play dough, they developed their ***fine motor skills*** as well as ***hand-eye coordination*** and explored ***different textures*** by playing with the play dough, seeds and sticks. Besides sharing the materials, the children discussed things among themselves, and the teacher was responsible for providing the learners with the appropriate vocabulary and explaining concepts to the learners.

The teacher also tried to correct children's misconceptions during this activity. For example, one child asked the teacher why Nankonhwea had such tiny legs. The teacher asked the group members if anybody knew why. One child explained that "if you don't eat, your legs will become small." Another child agreed and further said "even my sister's legs are small." These suggestions from the learners are demonstration of their understanding of the link between proper nutrition and healthy living, concepts that lay the foundation for children's future study of '***Food and Nutrition***' (one of the courses studied in the senior high schools of Ghana).

Although the teacher did not explore these concepts further, she accepted the children's explanation but explained to the learners that sometimes people are the way they are because that was how they were born. With this comment the teacher was suggesting to the learners that genetics and the environment (healthy eating) play a role in what we become. In this activity the teacher introduced the learners to one of the biology topics that children will study in their future ***science*** lessons. In this way, the children's understanding of their body parts goes beyond eating healthy food, as the children initially thought.

To further illustrate her point, the teacher asked the learners to compare their legs and see whether they were the same. The learners immediately discovered that they each had different sizes of legs. Comparison is an important ***mathematic*** concept that children learn in the kindergarten and study further in higher grades.

Furthermore, the teacher drew the learners' attention to a moral lesson from the story, namely that we must accept people the way they are. By emphasising a moral lesson, the teacher introduces **religious and moral education (RME)** to the learners. RME teaches learners moral values that equip them to live peacefully with others. This lesson is particularly relevant in the Ghanaian kindergarten context, because children become more aware of the need to accept others who are different from them.

Assessment: This stage allowed the teacher to assess children's understanding of the concepts and the diverse ways they expressed their knowledge and skills. The assessment task was linked to the activity 3. The teacher asked the children to display their creations (the favourite character that each child had moulded). The children displayed their creations on their tables and talked to their friends about them. This informal assessment practice is consistent with the recommendations of the KG curriculum, which suggests informal conversation, gallery work and observation as some forms of assessing children's learning at this level.

Consistent with the cultural-historical stance, teacher-child interaction during children's play is necessary to promote learning. The teacher moved around in the class asking the children questions such as:

“Which character did you choose?” “Which colours did you use for the head, legs, abdomen and arms?”

Child 1: “I chose Tikerengeren, my colours are red and green.”

Child 2: “My character is Tikerengeren, his head is broken.”

See Photograph 4.6 and Photograph 4.7.



Photograph 4.6: Child A moulds Tikerenkeren



Photograph 4.7 Child B moulds Tikerenkeren

The teachers' questions were intended to direct children's attention to the concepts of the parts of the body (head, abdomen, and legs) in addition to colours. However, the answer child 1 gave to the teacher (My character is Tikerenkeren, his head is broken) is an indication that the child was still in the *imaginary situation* (created in the story), although he was now moulding the character with real material (play dough). According to Fler (2011), play gives children the opportunity to move between reality and imagination. Fler encourages teachers to promote children's simultaneous experiences of being in and out of imaginary situations and in and out of reality, since these processes enhance conceptual formation.

Usually, kindergarten teachers in Ghana restrict their teaching to their planned lesson objectives without making the effort to integrate related concepts (*system of concepts*) as suggested by Fler (2011). The IPBP promotes learning of related concepts together and providing children with real materials with which they express their learning in the form of moulding (*rise to the concrete*). In this lesson, the focus (as the curriculum suggests) was on teaching the parts of the body; however, by integrating the conceptual play into the Anansi story, the teacher integrated other related concepts. For example, the "parts of the body" also talks about the colour of the shirts the 'people' wore, the sizes of their body in comparison to other parts and the way people relate with others who look different from the way they themselves

look. The 'part of the body' has therefore extended to shapes, colours, comparison, tolerance and empathy.

Furthermore, asking the learners to mould a character of their choice helped the children to rise to the concrete (Fleer, 2011). The children put the different concepts together as a whole and expressed their learning through their creations. This gave them the opportunity to think consciously about their understanding of the concepts.

Imagination is key to creativity. Through imagination, the moulding task brought out the children's creativity in the way they selected and combined different colours, shapes and materials to create their characters. This confirms Vygotsky's assertion that:

“... imagination, as the basis of all creative activity, is an important component of absolutely all aspects of cultural life, enabling artistic, scientific, and technical creation alike. In this sense, absolutely everything around us that was created by the hand of man, the entire world of human culture, as distinct from the world of nature, all this is the product of human imagination and of creation based on this imagination” (Vygotsky, 2004:9-10).

In other words, the children had to imagine their favourite characters in terms of the sizes of their body parts and the colours they wore in order to make their creations. Through conceptual formation, made possible by integrating the conceptual play into the Anansi story, the children understood the concepts of the various parts of the body and expressed that through their creations.

An integral part of the implementation phase of the IPBP was a continuous personal reflection. I provided the teachers with guidelines on keeping reflective journals (see appendix M). The teachers documented how they experienced the implementation of the indigenous play-based pedagogy by expressing their thoughts, feelings, fears, challenges and learning. The teachers also took photographs of their implementation to facilitate interview discussions with me towards the end of the programme.

- **Post-lesson discussion**

At the end of the lesson, the three of us (the two teachers and myself) had a discussion. We discussed the strengths of the lesson and areas for improvement with the teacher. One observation that I made which I discussed with the teachers was about one particular child's creation. The child had moulded a person with a big head, big abdomen and small legs. The instruction was that each child should mould one of the characters in the story, thus a person that either had a big head, a big abdomen or tiny legs. When the child presented her work to the teacher, the teacher concluded that the child was being creative. Although this child appeared to have been creative, I felt this child's work presented an opportunity for the teacher to explore the child's thinking behind the work. The child could be communicating something more than just being creative; for instance, was this child communicating a deeper feeling about herself or a situation she was familiar with, such as name calling? The only way to find out would have been through dialogue. The teacher could have engaged with the child in an informal conversation around the work, and through questioning the teacher might have been able to understand the child's work. Unfortunately, the teacher missed that opportunity.

Something else that I noticed about the lesson was the teacher's choice of the story. The story she had selected appeared to be relevant for the topic (parts of the body). However, it contained graphic expressions of violence (fall from a tree, broken leg and a bleeding beak), which makes it less suitable for young children. During this discussion phase, it was important to emphasise to the teachers the need to be sensitive to children's age and culture in selecting the stories for their lessons. The teacher decided she was going to incorporate the suggestions into her next lesson to improve the implementation.

4.5 MY REFLECTIONS ON THE CLASSROOM IMPLEMENTATIONS

In this section, I highlight my feelings and thoughts about a few other lessons that I observed. I did not include the complete lessons here (see appendix I for examples of lessons presented by the teachers. For easy referencing I numbered the lessons and indicated the participant who delivered it).

As indicated earlier, the main objective of the current study was to design, implement and evaluate an IPBPDP. By using an IPBP, the teachers were in most cases able to teach related concepts together, identify and explore teachable moments and were open to children's ideas and explore children's thinking behind their creation through questioning. However, I noticed that the teachers struggled to incorporate gender-related issues that the learners brought into the discussions. The teachers appeared to ignore such topics. I reflect on some of these lessons here.

- **Lesson 6: Presented by P4 (see appendix I for the complete lesson)**

Like the lesson presented by P6 (which was discussed above), this lesson also aimed to teach children the parts of their bodies. The teacher used an Anansi story, dramatisation and the construction of a human being with paper cut-out shapes. During the construction (activity 3) one child suggested to the teacher that a human being must have eyes, a nose, mouth and ears and not just a head, legs, trunk and hands. The teacher did not think it was necessary to add the facial features, so she told the learners it was all right to keep it as it was. I thought, probably the teacher did not have the appropriate shapes for the features the learners were suggesting. Therefore, I suggested to the teacher to ask the children how they could make those features in the face. One child answered, "we just have to use a pencil and draw it." The teacher agreed and drew those parts (see Photograph 4.5).

Soon after drawing those features, the children started arguing among themselves. They wondered whether the human they constructed was a woman or a man. This discussion would have helped the children to better understand their self-identities as boys or girls. However, the teacher seemed uninterested in the conversation and simply ignored the children. The teacher's comment to me later, "***I didn't think the children could go this far,***" suggests the teacher had a certain mind-set about how much the children could know. The statement showed that although she had been taught to be open to children's contributions to knowledge construction in the classroom, the teacher still had very low expectations of the children.

- **Lesson 9: Presented by P3 (see appendix I for complete lesson)**

This lesson saw the children work in groups, after which they were required to make presentations to the class. During the group presentation by one of the groups

(which had prepared an imaginary meal of rice and beans for supper), a boy from that group suggested that a girl should do the presentation. His explanation was that **“women do the cooking at home, so a girl must be the one to do the presentation.”** I was hoping the teacher would use the opportunity to disabuse the minds of the children of such gender stereotyping, but she accepted the boy’s suggestion and allowed a girl to do the presentation. By so doing, the teacher indirectly reinforced the children’s misconception regarding gender roles.

As much as I agree this is a cultural issue (some groups in Ghana insist cooking is the sole responsibility of woman, and hence the kitchen is forbidden for men), the teacher could have dealt with it tactfully. She could have explained to the learners that both men and women could cook. Furthermore, just as we have female chefs, we also have male chefs. With this explanation, the children would not see cooking as a reserve for women but as a career opportunity for both males and females.

Two things can be inferred from the foregoing discussion: (1) Were the teachers trying to shy away from gender issues, or (probably) disregarding them because these issues are not mentioned in the curriculum? These discussions by learners relating to gender and gender roles is a clear call to include such topics in the curriculum. (2) Were the teachers ignoring children’s suggestions to extend the lessons because they did not want to go beyond what they had planned to teach in the particular lesson (Hedges, 2014)? The teachers could at least have acknowledged the children’s suggestions or questions and make appropriate arrangements to deal with it at a different date, if they did not have time to continue the lesson. Alternatively, the teachers could ask the children to talk about the issues with their parents and give her answers when they return to school the following day. In this way the teacher would be involving the family and community in educating the learners, an approach that is consistent with the implementation of an indigenous play-based pedagogy (UNESCO & ARNEC, 2016).

4.5.1 The post-implementation phase (evaluation and reflection)

The aim of this final phase was to evaluate the outcome and influence of the indigenous play-based programme on the teachers. It involved a one-on-one semi-structured interview with the eight teachers to further discuss how the teachers implemented the IPBP and how their participation in the IPBPDP influenced their

implementation of the KG curriculum. Furthermore, the post-implementation phase tried to identify possible explanations for the changes that were evident in the teachers' classroom practices. The research question '*How can changes in teachers, if any, in knowledge and delivery of the curriculum be explained?*' was explored. The following three main themes and several sub-themes emerged:

- Changes in the teachers' curriculum delivery;
- Impact of the implementation of the indigenous play-based pedagogy on learners; and
- Possible factors responsible for teacher change in practice. See chapter 5 for a detailed discussion of the analysis and results of the post-implementation interviews.

4.6 MY REFLECTIONS ON THE PROCESS OF DEVELOPING THE IPBPD

4.6.1 Recruiting the participants: Reflection

In the Ghanaian culture, personally visiting people in authority to invite and seek their permission and consent in cases such as a research study is considered an act of respect for their office. Secondly, many times kindergarten head teachers in Ghana take a long time to respond to emails and letters. I therefore arranged individual meetings with each of the six kindergarten head teachers (principals) to discuss and submit an invitation to participate in the study. All the head teachers were willing and wanted their schools to participate. They believed that if the study was likely to help their learners, they were willing to allow the teachers to participate in the study. Having obtained their permission and consent I was allowed to interact with the teachers.

I had two meetings with the teachers at each of the school, first to explain the extent of their involvement in the study with them and to hand out the consent forms and then to collect the completed consent forms and agree on a date for the first interview. Two teachers from one school thought their involvement was going to be time consuming, particularly the workshop sessions, so they did not participate. The study commenced with ten teachers, two from each of the remaining five schools. One teacher dropped out before the first interview, another one went through the first interviews and the workshop sessions but did not continue with the remaining

activities. Hence, a total of eight teachers participated in the study. All eight teachers were teaching in kindergartens at the start of the study. By the end of the capacity building workshops one teacher was moved to take the place of a grade one teacher who had gone on maternity leave.

4.6.2 Workshop activities: Reflection

I organised the workshops in a centre offered by one of the head teachers, a computer laboratory for the school. Other teacher groups also used it for their workshop activities because it is in a central part of the municipality, making it accessible to all the participants. However, due to a double booking, another group was using the facility. The teachers suggested that instead of moving to another venue, we should have our activities under a shady tree in the compound. This second venue proved useful, as the teachers had a lot of space to perform the different indigenous play activities. The teachers also made use of the available materials such as branches, leaves and flowers from the trees to design play materials which they later used in their classrooms.

4.6.3 Implementation: Reflection

Eight of the teachers taught lessons at various times for me to observe. Most of these lessons were given under trees on the compound. Teachers and children from other classes looked from their classrooms or came around to watch what was going on in these lessons. Sometimes, during breaks, the children who took part in these lessons led their friends from the other classes to perform the games or sing songs they sang earlier. On one occasion, it appeared the entire school joined in a chorus that a class sang during an Anansi story session. The excitement that the children exhibited during these times made other teachers who did not take part in the study ask their colleagues who took part, to teach them what they had learnt at the workshop.

4.7 CHAPTER SUMMARY

The aim of the study was to develop an indigenous play-based programme to train kindergarten teachers in the competencies (knowledge, skills and attitudes) necessary for implementing an indigenous play-based pedagogy to deliver the KG curriculum. In this chapter I explained the four main phases (diagnosis, capacity

building, classroom implementation and post-implementation) of the development of the indigenous play-based programme. The overarching finding from the interviews in the diagnostic phase revealed that teachers' knowledge of what play-based pedagogy entails in practice varied. It was, however, evident that teachers were well disposed towards the use of indigenous play for kindergarten teaching if they received training.

In chapter 5, I present the results of the study.

CHAPTER 5

DATA ANALYSIS AND PRESENTATION OF RESULTS

5.1 INTRODUCTION

In chapter four I discussed the design and implementation of the IPBPDPG. The rationale for developing the programme as well as the various phases involved in developing the programme were also presented. This chapter presents the results of the study under two broad headings: pre-programme results (diagnostic phase interviews) and post-programme results. I first present the pre-programme results, which report on teachers' knowledge, attitudes and beliefs regarding play-based pedagogy and how these influence the way they implement play-based pedagogy in the KG situation. Two themes and eight sub-themes emerged from the analysis of the pre-programme interviews (Int1).

The second section comprises semi-structured interviews (Int2). The research question: *"How can changes, if any, in teachers' knowledge and delivery of the curriculum after following the professional development programme be explained?"* was explored.

Three main themes emerged from the analysis of the data: changes in the teachers' curriculum delivery, the influence of the IPBP on learners and the factors responsible for changes in teaching practice. I assigned numbers (P1, P2, P3 etc.) to each participant to conceal their identity. I applied the formula P1Int1:Q1 to code each portion of the conversation. P1 refers to the participant; Int1 refers to the first interview; Q1 refers to the participant's first quote; therefore, the code P1:Int1Q1 means participant 1, interview 1, quote 1. Additionally, to enable the participants to refer to the photographs during the second semi-structured interviews, I numbered the photographs from each participant. For triangulation of the data, data from my observation field notes (OFN) and participants' reflective journals (PRJ) is included in this discussion. Tables 5.1 and 5.4 present a summary of the themes and sub-themes from the pre- and post-programme results respectively.

5.2 DATA COLLECTION AND ANALYSIS PROCESS

The data collection commenced with the first individual semi-structured **interviews** (pre-programme), which took place at the beginning of the study. The following questions only served to guide the interview; further probing was done to stimulate conversation, seek clarity or maintain the focus of the conversation:

1. The kindergarten curriculum talks about learning through play. What comes to mind when we talk about play-based teaching?
2. Are you aware of any policy document or curriculum that talks about how children in the kindergarten should be taught?
3. How does the kindergarten curriculum say children in Ghana should be taught?
4. Do you think learning through play can have influence on the way children develop; why (or why not)?
5. Some teachers believe play and learning are two separate concepts which must be kept separate. What is your belief?
6. There are certain skills that the KG curriculum requires children to develop; do you believe play-based pedagogy can help children develop these skills?
7. Do you like to teach through play? Why (or why not)?
8. Can you explain how you use play to teach your learners curriculum concepts such as colours, shapes and matching?
9. How do you feel about teaching through play?
10. Can you tell me about your childhood play?
11. Do you think our indigenous play can help children achieve the goals of the curriculum?
12. Do you think your initial teacher training equipped you adequately to be able to teach through play?
13. What do you think kindergarten teachers need to be able to teach through play?

The classroom **observation** of the implementation of the indigenous play-based pedagogy (post-programme) was guided by the following pointers:

1. Did the teacher tell learners about the objectives of the lesson?

2. What kind of activity/activities were done during the lesson?
3. What were the roles of the teacher and the learners?
4. Where did the lesson take place?
5. Were the learners actively engaged in the lesson?
6. Were there enough materials and resources? Were the materials bought, collected from the environment or designed by the teacher and/or the learners?
7. Did the selected indigenous play activities promote imagination, thinking skills, problem solving, social interaction and conceptual development?
8. Did the children play indoors or outdoors?
9. Did the teacher join the children in their play?
10. How did the learners respond to the indigenous play-based pedagogy?
11. How did they feel?
12. How were learners assessed? Did the teacher apply the concept of “rising to the concrete”?

During the second round of semi-structured interviews, **photographs** taken by teachers were used to elicit conversation. The following questions were used to initiate and sustain conversation:

1. Tell me about the photographs you have selected, and why you selected them.
2. Explain how the photographs you selected represent the way you implement the indigenous play-based pedagogy.
3. Explain what area was used (indoors or outdoors) and why.
4. Describe what type of activity you photographed.
5. Explain the photographs you took where you observed ideas regarding play as learning.
6. Explain which materials you used to plan the lessons and why.
7. Explain strengths of and concerns about the use of indigenous play to teach.

In addition to the questions related to the photographs that the teachers took, the following interview questions were explored during the second round of semi-structured interviews:

1. Can you tell me how you implemented the indigenous play-based pedagogy in your classroom?

2. Do you think your colleagues implemented the indigenous play-based pedagogy the way they should do it? If yes, why do you think so? If no, why don't you?
3. Did you face any challenges when implementing the indigenous play-based pedagogy? If yes, can you elaborate on some of the challenges you faced in implementing the indigenous play-based pedagogy in your kindergarten setting?
4. Can you suggest what a teacher needs in order to implement an indigenous play-based pedagogy as expected?
5. How did your learners respond to the implementation of the indigenous play-based pedagogy in your classroom?
6. In which ways do you think your learners benefited from the implementation of the indigenous play-based pedagogy?
7. Do you have anything else to add?

5.3 PRE-PROGRAMME RESULTS

As indicated in par. 4.4.1, the development of the IPBPDP commenced with understanding teachers' prior knowledge, beliefs, attitudes and instructional practices of a play-based pedagogy; in other words, the training needs of the teachers were determined. Table 5.1 presents a summary of the themes and sub-themes of the diagnostic (pre-programme) interviews.

Table 5.1: Summary of themes and sub-themes from the diagnostic phase interviews (pre-programme findings)

Themes	Sub-themes
Theme 1: Play-based pedagogy	1: Knowledge 2: Attitudes 3: Beliefs 4: Approaches
Theme 2: Factors influencing implementation	1: Initial teacher training 2: Curriculum 3: Pressure from authorities and parents
Theme 3: Indigenous play	1: Childhood memories 2: Importance 3: Needs

5.3.1 Theme 1: Play-based pedagogy

This theme deals with the categories of knowledge, attitudes and beliefs that the teachers had regarding play-based pedagogy and the approaches they adopted to implement a play-based pedagogy prior to their participation in the IPBPDP as indicated in Table 5.2. Table 5.2 presents the inclusion and exclusion criteria for this theme and its sub-themes.

Table 5.2: Inclusion and exclusion criteria for theme 1 and sub-themes

Theme 1:		
<i>Theme 1: Play-based pedagogy</i>		
Sub-themes	Inclusion criteria	Exclusion criteria
Sub-theme 1: Knowledge	Data that demonstrates teachers' knowledge of what play-based pedagogy means (using play to teach concepts, doing a lot of activities, making lesson learner-centred), and how they employ play in practice such as for entertainment, attention grabbing and teaching of curriculum concepts; teachers' knowledge of the existence of a kindergarten curriculum; and the recommended approaches to implementing them in the KG classroom.	Excludes any data that does not show teachers' knowledge of what play-based pedagogy means (using play to teach concepts, doing a lot of activities, making lesson learner-centred) and how they employ play in practice, such as entertainment, attention grabbing and teaching of curriculum concepts; teachers' knowledge of the existence of a kindergarten curriculum and the recommended approaches to implementing them in the KG classroom.
Sub-theme 2: Beliefs	Data that shows teachers' beliefs regarding the importance of play and teachers' role in children's play; the value of play-based pedagogy to children such as active participation, social and language skill, understanding and retention of things learned.	Data that does not show teachers' beliefs regarding the importance of play and teachers' role in children's play; the value of play-based pedagogy to children such as active participation, social and language skill, understanding and retention of things learned.
Sub-theme 3: Attitudes	Data that shows how teachers feel about play-based pedagogy; including how often they employ play-based pedagogy in the KG classroom and	Data that does not demonstrate the way the teachers feel about play-based pedagogy, including how often they employ it in the classroom and

Theme 1: <i>Theme 1: Play-based pedagogy</i>		
Sub-themes	Inclusion criteria	Exclusion criteria
	the learning areas they teach through play-based pedagogy.	the learning areas they teach through play-based pedagogy.
Sub-theme 4: Approaches	Data that shows the methods (direct instruction, demonstration, role play) that teachers employed in 'play-based' pedagogy.	Data that does not show the methods (direct instruction, demonstration, role play) that teachers employed in 'play-based' pedagogy.

5.3.1.1 Sub-theme 1: Knowledge

This sub-theme deals with teachers' knowledge of what play-based pedagogy means and what it entails in practice, in the kindergarten classroom. Half (4) of the teachers thought play-based pedagogy meant using play to teach certain concepts. Two (2) said play-based pedagogy involved doing a lot of activities with learners. The remaining two (2) said a lesson is play-based if it is "child-centred." The following are representative views of the teachers.

P1int1Q1: "What easily comes to mind is using play to teach certain concepts for the children to understand."

P2int1Q1: "What it means is that everything we do must be done through activities such as role play."

P5int1Q1: "What comes to mind is that when you are teaching you should make the lesson child-centred where the child can participate."

The sub-theme also examines what the teachers thought play-based pedagogy entailed in practice. The findings showed that the teachers thought play-based pedagogy in practice involved employing some form of play activity such as singing and dancing in the KG classroom to gain the attention of learners and keep them from getting bored. The following views represent the teachers' voices.

P2int1Q2: "When it comes to the KG level, if you teach them without play you can't get their attention; that is why at some point we stop and sing."

P7int1Q1: "... you know, in KG they are young, so when you keep talking too much, the children will get bored and they may fall asleep. So, when you teach, you intercept it with play so that they don't fall asleep or get bored."

All the teachers appeared to have some knowledge of what play-based pedagogy meant, however, in practice, they used it mainly to catch children's attention instead of using it as a context for facilitating conceptual development.

This sub-theme further focuses on teachers' knowledge of the existence of a curriculum or a policy on KG teaching and learning. I wanted to find out whether the teachers were aware of the existence of any policy or a curriculum that showed how kindergarten children in Ghana should be taught. The majority (5) appeared unaware of the existence of such a curriculum or policy:

P3int1Q1: "Not really, no, I do not know of any policy."

P7int1Q2: "Policy? Policy for what?"

P6int1Q1: "No, I don't know of any such document which shows us how to teach children in the KG."

Of the remaining three who claimed they were aware of the existence of a curriculum or a policy on how children in the kindergarten should be taught, only one specifically mentioned the Ghanaian KG curriculum:

P1int1Q2: "We have the kindergarten curriculum."

As regards the recommended instructional approach to implementing the KG curriculum, different views were presented. The teachers asserted that the curriculum was short on implementation details. Two teachers explicitly stated that the curriculum did not mention play at all. Three others did not mention that the KG curriculum is play-based. Only one teacher unambiguously responded that the KG curriculum demanded that they teach the learners through play. These are some representative voices of the teachers:

P3int1Q2: "Oh, as for the curriculum, it is just a skeletal something, the topics are there but you the teacher have to think, look at the level of the class and do what will suit their level."

P1int1Q3: "... the curriculum does not specifically mention play; however, it really advises the teacher to use her own methods to teach the children to understand."

Clearly, the teachers were not conversant with the recommended (play-based) pedagogy for implementing the KG curriculum.

5.3.1.2 Sub-theme 2: Beliefs

Since one's knowledge can influence what one believes in, I wanted to find out what the teachers believed was the importance of play at the KG level and what roles the teachers performed in children's play. The findings revealed that the teachers believed that play promotes language and social skills in learners, enhances understanding and retention of things learned and encourages active child participation. The teachers also indicated that children learn as they play. The following are some of their views:

P5int1Q2: "... children, when you teach them through play it sticks, and they will always remember."

P4int1Q1: "... as the children play, they speak, sing and you the teacher will give instruction and they have to listen and that will help them develop listening and speaking skills."

P8int1Q1: "Play involves learning... we don't play in a vacuum; we play to learn."

As regards what the teachers believed were their roles during children's play, the teachers used the following words to describe their roles: guide, supervise, monitor, teach, demonstrate, lead, observe, provide and participate. Almost all (7) of the teachers indicated their role as supervisory. Their concern was to ensure the children did not hurt themselves. Only one teacher mentioned that her participation in children's play ensured that the children enjoyed the play. One other teacher noted that she had to provide children with relevant play materials. Another teacher believed her role included teaching children the rules of the game and to guide children towards intended concepts. Below are some of their views:

P7int1Q3: "... you can always go around and check them so that they don't get hurt ..."

P8int1Q2: "Guide them in the play ... observe ... involve the children as they play... the teacher should not be involved too much in the play ..."

As regards the relationship between play and learning, all the teachers believed that as children play they learn. However, they made it clear that teaching should be separate from playing. Examples of their views:

P3int1Q3: "... Yes, I believe that when they play they learn, but not at the time you are trying to impart (teach) a ... concept to the children."

P7int1Q4: "... by all means they can learn ... not play all the time ... we can use both play and teach."

5.3.1.3 Sub-theme 3: Attitudes

Having explored teachers' knowledge and beliefs regarding play-pedagogy, it was important to examine their disposition towards it. This sub-theme focuses on how teachers felt about implementing a play-based pedagogy. Teachers' attitudes as evident from the findings were contradictory. Half of the teachers felt play-based pedagogy was demanding and time consuming and referred to the amount of work they had to do to implement a play-based pedagogy. Some of their views:

P1int1Q4: "Teaching through play is very demanding. I have to get this and get that, so I will not go there..."

P6int1Q2: "... it wastes time."

The other half felt that play-based pedagogy was interesting and exciting, linking their feelings to those of their learners. The following were some of their comments:

P5int1Q3: "It is very interesting because... the children ... enjoy it."

P3int1Q4: ... it's exciting ... and the children ... really enjoy it."

5.3.1.4 Sub-theme 4: Approaches

Considering the teachers' knowledge, beliefs and attitudes towards play-based pedagogy, it was important to find out whether the teachers implemented a play-based pedagogy or not and, if they did, what approaches they followed when implementing a play-based pedagogy. The findings show that the most common approach was a combination of direct instruction and children's use of familiar teaching-learning materials or objects such as bottle tops, drinking straws and other play materials to complete tasks. Half of the teachers claimed they used these approaches. Here are some of their views:

P1int1Q5: “Let’s say I want to teach shapes such as rectangles, triangles, squares and circles. After teaching all the shapes on the board, I provide the learners with cut out shapes of the different shapes ... I then ask them to use the cut-out shapes to build a house, for instance. I ask them to use the triangle as the roof; rectangle as a door, and squares as windows.”

P5int1Q5: “If I want to teach numbers, I will bring some objects such as bottle tops, drinking straws and empty bottles to the class. I will call out a number and ask a child to pick the number of bottle tops and show it to the class. I will then ask the child, “How many bottle tops do you have in your hands?”

Only one teacher mentioned that she used role play in teaching some of her lessons. Even in this case, the teacher did not involve the learners. She only demonstrated the concept to the learners. Thus, she said one thing (use of role play) but did a different thing (use of demonstration). Here is what she said:

P8int1Q3: “The other day I used role play to teach sources of water. I pasted the chart of sources of water on the chalkboard. I then put something on my head like a bucket and pretended I was going to fetch water. I put the bucket down and pretended I was fetching water with a cup into my bucket. I asked the children “what am I doing”? The children said I was fetching water. I asked them to come to the chart and show me the source of water that is fetched that way. A child pointed at the river water on the chart.”

Although this teacher claimed she used role play in teaching the topic, it is obvious that the approach did not promote children’s active participation, imagination, problem-solving and social interaction as characteristics of many of the play-based pedagogies that are recommended by scholars such as Flear (2011) and Mackenzie (2013).

5.3.2 Theme 2: Factors influencing the implementation of play-based pedagogy

The previous theme looked at teachers’ knowledge, beliefs and attitudes towards play-based pedagogy. This theme examines the factors which the teachers claimed influenced the way they implemented ‘play-based pedagogy’ prior to their

participation in the indigenous play-based professional development programme. The factors the teachers identified were categorised into three sub-themes:

- Initial teacher training
- Curriculum
- Pressure from authorities and parents

Table 5.3 presents the inclusion and exclusion criteria for this theme and its sub-themes.

Table 5.3: Inclusion and exclusion criteria for theme 2 and sub-themes

Theme 2: Factors influencing implementation of play-based pedagogy		
Sub-themes	Inclusion criteria	Exclusion criteria
Sub-theme 1: Initial teacher training	Data that shows the kind of initial teacher training the teachers had and the depth of the courses they studied.	Data that is not related to the kind of initial training that the teachers had and the depth of the related courses that they studied
Sub-theme 2: Curriculum	Data that indicates challenges the teachers identified with the KG curriculum.	Data that does not highlight the inherent difficulties with the KG curriculum.
Sub-theme 3: Pressure from authorities and parents	Data that relates to education authorities and parents.	Data that is not related to education authorities and parents.

5.3.2.1 Sub-theme 1: Initial teacher training

The findings showed that the initial training the teachers received contributed to their inability to implement a play-based pedagogy. Half of the teachers lamented that the kind of courses they studied during their initial teacher training did not prepare them adequately to enable them to implement play-based pedagogy. In short, the teachers claimed they were not taught how to use play to teach.

P6int1Q3: "No, because what we learned is different from what we are doing. They didn't teach us how to use play to teach."

P3int1Q5: "I didn't do Early Childhood Education. I did Basic Education; that one is about designing materials that you can use to help children to learn."

The other group of teachers, who claimed they took courses that included play-based pedagogy during their initial teacher training education, complained about the lack of depth of the course they took. Here are some of their views:

P1int1Q6: "... somehow, because some of the lecturers when they are teaching us they will just mention it (play-based teaching) but they will not go into details."

P8 int1Q4: "They gave us the methods which involve play as part of teaching, but they didn't go in-depth..."

Although a couple of the teachers claimed the courses they did prepared them adequately to be able to teach through play, they were unable to explain the skills and knowledge they had acquired from those courses. This is what one of them said:

P7int1Q5 "Oh yes, because sometimes the teachers who taught us, when they come to class they perform some play that makes us dance and that makes us happy."

5.3.2.2 Sub-theme 2: Curriculum

The teachers complained that the curriculum itself was deficient when it came to its implementation guidelines. The teachers said the KG curriculum did not provide details on how they could use play to teach; they had to use their own discretion in implementing the curriculum. Here are some of their views:

P5int1Q5: "Oh, as for the curriculum, it is just a skeletal something, the topics are there, you, the teacher, have to think, look at the level of the class and do what will suit their level. The curriculum is just there to guide you."

P1int1Q7: "... the curriculum ... advises you to know that you have to use your own methods to teach the children to understand."

5.3.2.3 Sub-theme 3: Pressure from authorities and parents

The findings show that all the teachers admitted that the pressure they felt from education authorities and parents to produce outputs in the form of completing assessment tasks prevented them from employing play-based pedagogy in the kindergarten classroom. However, the teachers reacted to this pressure in different

ways: while some felt helpless, others thought they could find a way around the pressure and still be able to employ a play-based pedagogy. Below are some of their views:

P1int1Q8: “The fact is that the office will come for inspection, that is our problem. They come to look for output of work and when you want to teach through play it takes time. ... if you don’t take care, you spend 2-3 days on a story and when they come around and you don’t have enough output of work they may think you are not teaching, that is why I don’t make it (play-based pedagogy) part of my teaching.”

P5int1Q6: “... because if you don’t do the exercises in the workbook and the end of the year the child takes the workbook home, then you are in trouble.”

P6int1Q4: “You are supposed to teach for about thirty minutes, so when you involve the play, it will extend the time.”

P8int1Q5: “We have pressure from them, so the teacher should be creative. That’s all! You have to be creative, so that after doing the play (based-pedagogy), you find means in putting down something” (to assess the children’ learning).”

The above statements reveal the way teachers perceived play-based pedagogy in practice. The teachers first saw play-based pedagogy as an approach that did not lend itself to the assessment of children’s work. To them, assessment had to do with formally written exercises that they could show to school authorities and parents. Secondly, the teachers also saw play-based pedagogy as time-consuming, therefore it could not be employed within the current school time schedule (30 minutes per lesson). These misconceptions, coupled with inadequate initial teacher training as well as a lack of explicit guidelines on its implementation in the curriculum appeared to be some of the reasons why the teachers could not employ play-based pedagogy to implement the KG curriculum.

5.3.3 Theme 3: Indigenous play

Based on the results that I have presented so far, it was necessary to explore teachers’ knowledge and disposition towards indigenous play to use that as a point of departure in designing the indigenous play-based professional development

programme. Three sub-themes emerged. Table 5.4 presents the inclusion and exclusion criteria of the theme and sub-themes.

Table 5.4: Inclusion and exclusion criteria for theme 3 and sub-themes

Theme 3: Indigenous play		
Sub-theme	Inclusion criteria	Exclusion criteria
Sub-theme 1: Childhood memories	This sub-theme includes data related to teachers' experiences of indigenous play, adults' involvement in their play, the different types of indigenous play that they engaged in as children.	This sub-theme excludes data that does not refer to teachers' memories of childhood play.
Sub-theme 2: Importance	This sub-theme includes data that refers to the importance of indigenous play in the lives of children, such as socialisation, language development and learning.	This sub-theme excludes data that does not refer to the importance of indigenous play.
Sub-theme 3: Needs	This sub-theme includes data that indicates what teachers' needs are, such as workshop training, resources and knowledge, to implement an indigenous play-based pedagogy.	This sub-theme excludes data that does not mention teachers' needs with regard to the implementation of an indigenous play-based pedagogy.

5.3.3.1 Sub-theme 1: Childhood memories

This sub-theme explores teachers' memories of their childhood play. The findings showed that all the teachers had within their competence repertoire a number of indigenous Ghanaian childhood games and stories. The following statements show what the teachers remembered of their own indigenous play experiences as children:

P5int1Q7: "... we lived in a compound house. ... there were a lot of children, so normally we will come out and do a lot of games... We also did Pilolo, Ampe and because the house was big, in the evenings the fathers used to organise dancing competition for the children and the one that will be able to dance well received a prize" (laughing).

P3int1Q6: "... the indigenous play I do remember was "mo ma yenkor hwe Adwoa Atta" (let's go and visit Adwoa Atta). This one deals with a family... Children sing ... Then the mother responds Then the children ... sing again la, la, la, la,la,la,la,la,la,la,la, na mu mfere ne so nkor e."

P1int1Q10: "Oware, Nana wo ho, pinpina, ampe, me mameee rice wata, Anhwe akyire."

5.3.3.2 Sub-theme 2: Importance

The teachers asserted that the various indigenous games that they engaged in as children provided them with opportunities to learn, socialise, communicate and to develop physically:

P5int1Q8: "... I remember when we were kids, the kind of play we engaged in was teaching us a lot ..."

P1int1Q11: "When ... playing ... "memame eeh, rice wata, you can communicate easily with that person... they can ask, 'wo, yewu wu da ben' (when were you born?) Is that not communication? Will that not develop friendship?"

P8int1Q6: "kremesim, ... In fact, I love that game so much because it helps me move my body very well."

5.3.3.3 Sub-theme 3: Needs

As evident above, all the teachers had experienced different forms of indigenous play and believed the importance of play lay in the learning and development of young children. Nevertheless, the teachers expressed a lack of ideas on how to use those childhood play memories in a productive way to enhance the holistic development of the child. The teachers thought they needed to be trained to enhance their knowledge-base of Ghanaian indigenous play and how to effectively use it in teaching in the kindergarten. These are some of the teachers' views:

P8int1Q7: "... academic in-service training to broaden our knowledge and to know a lot of play that we can use."

P5int1Q9: "... I believe there have to be workshops."

P7int1Q6: "... I do not know all the different types of play, so if you have some you can teach me so that I'll also know it ..."

These statements are an indication of the teachers' willingness to use play pedagogy if they are trained to do so. In summary, the findings of the diagnostic phase showed that:

- The teachers had varying perspectives of what play pedagogy entails;
- The teachers lacked the knowledge of the principles that underline the KG curriculum and the recommended instructional approach;
- The teachers mostly used play as an attention grabber instead of a context for teaching;
- The initial training the teachers received did not prepare them adequately to implement the play-based pedagogy;
- All the teachers had knowledge and experience of various indigenous Ghanaian games and Anansi stories, but lacked knowledge of how these could be used to teach concepts in the KG curriculum; and
- The teachers were well disposed towards the use of different indigenous Ghanaian games and Anansi stories to implement the KG curriculum, provided that they received training in indigenous play-based pedagogy.

In the next section I present the post-implementation findings.

5.4 POST-PROGRAMME RESULTS

In Table 5.5, I present a summary of the themes and sub-themes that emerged from the post-programme interviews, participants' reflective journals, photo voice and my observation field notes. Three themes and 11 sub-themes emerged.

Table 5.5: Summary of themes and sub-themes from the post-implementation analysis

Themes	Sub-themes
Theme 1: The indigenous play-based professional development programme	Knowledge Beliefs Attitudes Approaches
Theme 2: The indigenous play-based pedagogy: influence on learners	5.4.2.1 Agency in learning 5.4.2.2 Interest in lessons 5.4.2.3 Imagination 5.4.2.4 Holistic development

Themes	Sub-themes
Theme 3: Possible explanations for teachers' change in practice	2.5.1.2 Learner factor 5.4.3.2 Teachers' personal factors 5.4.3.3 Teachers' hopeful expectations

5.4.1 Theme 1: The indigenous play-based professional development programme

Analysis of the interview data and my observation field notes, in addition to participants' reflective journal entries, showed that the teachers changed the way they implemented the kindergarten curriculum following the indigenous play-based professional development programme. The teachers' changes were exemplified in four ways: the teachers' knowledge, beliefs, attitudes and consequently their approaches to implementing the indigenous play-based pedagogy. The inclusion and exclusion criteria that guided the analysis in identifying the theme and its sub-themes are set out in Table 5.6 below.

Table 5.6: Theme 1: Inclusion and exclusion criteria

Theme 1		
Indigenous play-based professional development programme		
Sub-themes	Inclusion criteria	Exclusion criteria
Sub-theme 1: Knowledge	Data that explains how the teachers use Anansi stories and other indigenous play to create imaginary situations for teaching in order to teach concepts in the KG curriculum	Data that does not explain how the teachers use Anansi stories and other indigenous play to create imaginary situations in order to teach concepts in the KG curriculum
Sub-theme 2: Beliefs	Data that shows that teachers use indigenous play activities in their classrooms in ways rather than just for grabbing attention	Data that shows teachers' use of indigenous play activities in the classroom merely for grabbing attention
Sub-theme 3: Attitudes	Data that shows changes in the teaching and learning dynamics between the teacher and the learners; and teachers cooperating with each other	Data that does not demonstrate teachers' change in attitude towards indigenous play-based teaching and the teaching dynamics between her and learners; and teachers cooperating with each other
Sub-theme 4: Approaches	Data that involves teachers using hands-on teaching approaches such as role play, dramatisation,	Data that does not include the use of hands-on teaching approaches such as role play, dramatisation, drawing,

Theme 1 Indigenous play-based professional development programme		
Sub-themes	Inclusion criteria	Exclusion criteria
	drawing, painting, the narration of stories and moulding, the use of outdoor environment in implementing curriculum contents.	painting, the narration of stories and moulding and the use of outdoor environment to implement curriculum contents.

5.4.1.1 Sub-theme 1: Knowledge

The teachers demonstrated their acquisition of knowledge in the implementation of the indigenous play-based pedagogy. The majority (5) of the teachers explained that through the programme they had acquired new knowledge and skills that helped them to use different indigenous Ghanaian play activities to teach concepts. These are some representative views of the teachers:

“I did not know I could use Nana wo ho to teach two- or three-letter words; ... after the workshop, we now know ...” (P2int2Q1& RJ).

Some of the teachers were able, after the programme, to create their own stories to teach concepts:

“... create my own story ... because I know that through that the children learn a lot” (P1int2Q1).

Furthermore, the teachers acquired the knowledge and skills that helped them organise their classroom in various ways. This comment is a representative view:

“... previously we were thinking we did not have enough space, but after the workshop we know that we can even set up certain arrangements in the classrooms for the children to feel comfortable” (P1int2Q2).

Photograph 5.1 below confirms teachers' acquisition of knowledge, shown in the way they arranged their classrooms during lessons.



Photograph 5.1: Seating arrangement

Photograph 5.1 shows a semi-circular seating arrangement during an Anansi story session. The teacher arranges all the tables at the back of the classroom, giving the learners direct face-to-face contact with the teacher.

5.4.1.2 Sub-theme 2: Beliefs

The pre-programme results (see par. 5.3.1.3 above) showed that the teachers strongly believed that play is relevant for children’s development and learning, but nevertheless did not take an active, facilitating role in children’s play. The post-programme results, however, showed that after their participation in the IPBPDP the teachers performed active roles in children’s play, demonstrating concepts and providing materials for their play. Photograph 5.2, Photograph 5.3 and Photograph 5.4 below are examples of the active roles the teachers played during children’s play to promote learning.



Photograph 5.2: The teacher explains the use of the material to the learners



Photograph 5.3: The teacher is demonstrating with clay



Photograph 5.4: The teacher as a play partner

In Photograph 5.2 the teacher provides social-culturally relevant materials for children's play and discusses their use with the learners. In Photograph 5.3 the

teacher demonstrates to learners how to use clay to mould different characters in the story narrated earlier. Photograph 5.4 shows the teacher in the role of a play partner. She acts in the place of an older player, seeing to the flow of the game. In this game she is not just a teacher supervising, she is part of the game.

5.4.1.3 Sub-theme 3: Attitudes

Evidence from the second interview and my observation indicates that the teachers' attitude towards the KG curriculum delivery had changed. The teachers explained that they collaborated with each other in designing and mobilising resources and teaching-learning materials for lessons

"We have even decided to ask the primary school teacher, there is a male teacher who has been helping us to ask the primary school pupils to bring us clay. We will keep it somewhere and anytime we need it we go for it"
(P2Int2Q2).

The teachers also indicated a change in the mode of interaction that took place between them and their learners during lessons. They did not assume the position of the 'knowledge pot', with the learners being passive recipients of the teachers' knowledge. The teachers mentioned that they were open to learners' contributions to knowledge construction in the classroom. The teachers were co-learners with the children. Photograph 5.5 and my observation field notes confirm the claim:

In my observation of this lesson, the teacher having constructed a human being with different shapes, accepted to draw facial features such as nose, eyes and mouth as suggested by the learners (OFN, 13-3-2017).

"... The learners will rather teach you, you will not teach them, because it helps them to think wide and far" (P8Int2Q1).

In the photograph, the teacher is drawing the facial features as the children suggested.



Photograph 5.5: The teacher is drawing facial features

5.4.1.4 Sub-theme 4: Approaches

The data revealed that the teachers changed their instructional approaches to delivering the KG curriculum. The majority (7) of the teachers employed narration of Anansi stories in combination with hands-on and child-centred approaches such as role play, dramatisation, moulding and the use of a video. (Photograph 5.8 explains how a teacher integrated the use of a video into an Anansi story to implement an IPBP). The teachers also explained that they engaged children in outdoor activities in order to provide a different learning environment that engaged the emotions of the learners:

“And teaching hasn’t been one way as it was as usual. Teaching has now changed in my class. Teaching has changed through the play and the storytelling. It wasn’t like first, where I just tell the story then we stand up and go. But this time we extract a lot and learn a lot from the story” (P8RJ).

“I used an Anansi story to teach parts of the body. I used the box. It is like a television, so when I was telling the story then I was showing them the pictures. After that I asked them some questions and then I asked them to mould the characters in the story” (P6 Int2Q1).

“When I am teaching, for instance, I try to change the environment. When I am using a story and the play to teach, I take the learners outdoors. This

helps to change their mood and they feel free to express themselves” (P8Int2Q2).

Photograph 5.6, Photograph 5.7 and Photograph 5.8 below are examples of the different approaches the teachers employed to implement the curriculum concepts:



Photograph 5.6: Dramatisation



Photograph 5.7: Making supper



Photograph 5.8: Use of a video



Photograph 5.9 Moulding



Photograph 5.10: Use of outdoor space

In Photograph 5.6 the children are dramatising a forest scene from the story the teacher had narrated to them earlier in the classroom. Photograph 5.7 shows children role playing ‘making supper’. In Photograph 5.8 the teacher was showing the learners a video of a tortoise, based on an Anansi story the class was discussing. Photograph 5.9 shows a child happily presenting her creation to her teacher. Photograph 5.10 shows a teacher doing a lesson outdoors.

In my field notes, I recorded the following about the ‘making supper’ lesson (Photograph 5.7):

During the activity in photograph 5.7, the teacher was teaching ‘meals of the day’. She put the children in three groups, each of which group A, B and C, was to ‘prepare’ a meal for breakfast, lunch or supper. The teacher provided the class with a box that contained all the different ingredients (such as corn dough, raw beans, sugar, and a boiled egg) that each group would require to make their meals. Each group was to nominate a representative who would go to the box and sort their groups’ ingredients. After that, each group engaged in pretend play to prepare their meals. The group in photograph 5.7 were required to prepare ‘supper’. I noted that during this activity the children argued and discussed different ways of first arranging the stones to make the ‘fire’. The children dismantled and kept arranging the stones until they agreed it was properly done. Secondly, the children one after the other argued about the right way to cook their ‘meal’. What I found interesting with this activity was the amount of discussion, argumentation, problem solving and leadership that was evident throughout the activity. Even though the teacher did not seem to be paying attention to the “unplanned” incidental learning that was happening, it was evident during this activity that the children learned more than the teacher had planned for (OFN, 28-3-2017).

5.4.2 Theme 2: The indigenous play-based pedagogy: influence on learners

The analysis of the interview and participants' reflective journals following teachers' participation in the IPBPDP revealed that the implementation of the IPBP influenced the learners. The teachers indicated four main areas where the learners were influenced:

- Learners demonstrated agency in learning.
- Learners showed more interest in lessons.
- Learners demonstrated imagination and active construction of knowledge.
- Learners developed holistically.

Table 5.7 shows the inclusion and exclusion criteria for theme 2 and its sub-themes.

Table 5.7: Indigenous play-based pedagogy: influence on learners: inclusion and exclusion criteria

Theme 2: Indigenous play-based pedagogy: influence on learners		
Sub-themes	Inclusion criteria	Exclusion criteria
Sub-theme 1: Agency in learning	Data that shows learners' active participation and eagerness to take initiative in lessons	Data that does not demonstrate learners' active participation and eagerness to take initiative in lessons
Sub-theme 2: More interest in lessons	Data that demonstrates learners' interest in lessons, such as learners discussing and re-enacting stories among themselves, paying attention in class and staying in lessons instead of giving excuses to go out during lessons	Data that does not depict learners' interest shown through learners discussing and re-enacting stories among themselves, paying attention in class and staying in lessons instead of giving excuses to go out during lessons
Sub-theme 3: Imagination and active construction of knowledge	Data that shows learners giving new meaning to objects, using meta-communicative languages and demonstration of imagination	Data that does not show learners giving new meaning to objects, use of meta-communicative languages and demonstration of imagination
Sub-theme 4: Holistic development	Data that mentions children developing holistically or social skills	Data that does not include children developing holistically or social skills

5.4.2.1 Sub-theme 1: Agency in learning

The majority of the teachers commented that the implementation of the IPBP made learners happy, hence unearthing the learners' agency in their learning. The teachers explained that their learners actively participated in lessons and were eager to take initiative to contribute to class discussions and volunteer to take part in learning activities. The children were actively constructing knowledge as they tried alternative ways of doing things:

"... but this one they were all out, they want to say something even if you don't call them they want to come out and say something" (P2Int2Q3).

"They were involved in the lesson and they did almost everything ... it is because they themselves were the people doing the activities. I was just a guide directing them and they were doing their own thing" (P3Int2Q1).

Photograph 5.11, Photograph 5.12 and Photograph 5.13 below confirm teachers' claims of children's active participation in lessons and active construction of knowledge. Photograph 5.11 shows learners actively participating in a moulding task following an Anansi story session. The children are at various levels of completing their task.



Photograph 5.11: Active participation



Photograph 5.12: Making an imaginary fire



Photograph 5.13: Dismantling stones



Photograph 5.14: Cooking imaginary food

In Photograph 5.12, Photograph 5.13 and Photograph 5.14 learners are pretending to be cooking rice and beans. The learners would first have to set the fire by arranging the three stones the teacher had given them. In Photograph 5.12 the group had ‘made’ the fire and were ‘cooking’ the rice, however, a moment later one member of the group decided that stones were not properly arranged, which implied that the fire was not properly made. In Photograph 5.13, the children agreed to dismantle and reorganise the stones. In Photograph 5.14, the fire appeared to be properly set and the learners were happy to continue their cooking.

The following observation field note supports the teachers’ point of view.

Observing this lesson, I noticed that the teacher gave the learners a lot of room to make decisions, argue and try out alternative ways of completing the task. In the process the learners developed problem solving and observation skills as well as tolerance and cooperation (OFN, 28-03-2017).

5.4.2.2 Sub-theme 2: More interest in lessons

The teachers mentioned that their learners showed more interest in lessons each time the IPBP was used when delivering lessons. The teachers observed that the learners discussed stories and re-enacted the stories they had heard in previous lessons all by themselves. Some of the teachers also indicated that their learners demonstrated increased interest in lessons by being attentive during lessons from start to end. The teachers explained that the learners did not give excuses to leave class during lessons; instead, the learners even refused to go out for a break during break time:

“I taught the lesson yesterday and this morning when I came back, the children themselves were telling the story and were role-playing” (P5Int2Q1).

“... even when it was break time they didn’t mind staying on because they were enjoying the lesson. Unlike previous times, even if it was not the time for a break, they will say ‘I am going to drink water’; ‘I am going to wee’. But this time ... they didn’t want to miss any aspect of the lesson” (P1int2Q3).

Photograph 5.15 below confirms children’s improved interest in lessons:



Photograph 5.15: Children show more interest in lessons

Photograph 5.15 shows these children continue working on their task even though it was break time. One child was watching while the other one made her creation.

5.4.2.3 Sub-theme 3: Imagination and active construction of knowledge

The teachers indicated that the children engaged in active and extended imagination and creativity. The teachers explained that within the imaginary situation (as they narrated the Anansi stories) the learners gave new meaning to objects and even used meta-communicative languages to make their thinking clear.

“Yesterday, when I was teaching them through an Anansi story about the hunter, as soon as I brought out the props, one child immediately got up and picked a stick and said “I have seen an animal, shoot, kpooo.” Then he started shooting. Then immediately, another child came and took my

cloth and put it on “I am the king, I have money.” Then he started acting like a king. Then another one also “I am going to be the linguist” and another one “I am the queen.” Then they started walking about like kings and queens” (P8Int2Q3).

“... I told them an Anansi story about three animals in the forest who planned to cook some meals. After the story, I asked the children to mould any one of the animals in the story. The children moulded several other animals that were not even mentioned in the story. They moulded an elephant, a tiger and a snake And I asked them, did you see them? and they said yes, I can see that these ones can also be in the forest. And I said okay, what else? They said you can see mountains and you see hills and people climbing and descending it. You can also see rocks and I was surprised at the children, because we were talking about only three animals, but they extend it to different animals and they moulded different and wonderful animals” (P8Int2Q4).

5.4.2.4 Sub-theme 4: Holistic development

The teachers believe that the implementation of the IPBP enhanced the holistic development of their learners (psycho-social, physical, emotional and cognitive). The teachers explained that the group tasks they gave their learners helped them to develop psycho-social skills such as self-expression and self-confidence, which in turn helped them to overcome shyness:

“When they do group work it helps them to develop self-confidence and self-expression” (P6Int2Q2).

“... At the end of the day you will know that the children are really socialising and ... I see some aspect of psycho-social skills in the children... you will know that the children are... using their gross and fine motor ...” (P1Int2Q4).

5.4.3 Theme 3: Possible explanations for changes in the teachers’ practice

As evident from the findings that showed that the teachers changed in terms of their knowledge, beliefs, attitudes and practice following the indigenous play-based programme, it is important to examine the possible factors that explain these changes. Based on the interview protocol together with the analysis, several factors

were identified that could have brought about the changes as discussed earlier under theme 1. These include factors that have to do with learners, teacher-personal factors and teachers' hopeful expectations. Table 5.8 lists the inclusion and exclusion criteria for this theme and sub-themes.

Table 5.8: Theme 3: Inclusion and exclusion criteria

Theme 3		
Possible explanations for changes in the teachers' practice		
Sub-themes	Inclusion criteria	Exclusion criteria
Sub-theme 1: Learner factors	Data that shows teachers' satisfaction as a result of the joy their learners derived from the implementation of the IPBP	Data that does not show teachers' satisfaction as a result of the joy their learners derived from the implementation of the IPBP
Sub-theme 2: Teachers' personal factors (enhanced competencies)	Data that shows teachers have acquired knowledge and skills in using indigenous play for teaching curriculum contents and managing their classes	Data that does not show that teachers have acquired knowledge and skills in using indigenous play for teaching curriculum contents and managing their classes
Sub-theme 3: Teachers' hopeful expectations	Data that expresses teachers' expectations of the effectiveness of the IPBP in reviving Ghanaian indigenous play and for promoting Ghana's education	Data that does not express teachers' expectations of the effectiveness of the IPBP in reviving Ghanaian indigenous play and for promoting Ghana's education

5.4.3.1 Sub-theme 1: Learner factors

As discussed in par. 5.5 above, the teachers asserted that the implementation of the IPBP positively influenced the learners. The changes that the teachers observed in their learners appeared to be one of the reasons for changes in teaching practice: The teachers explained that the joy learners derived from the implementation of the IPBP encouraged them to adopt the IPBP.

"I am very happy. Because if you see the kids you are teaching happy, excited about your lesson it makes you the teacher also happy. And that gives you the joy to go on" (P2Int2Q4).

5.4.3.2 Sub-theme 2: Teachers' personal factors (enhanced competencies)

Teachers' personal factors such as enhanced competencies could be another reason for the change in teaching practice. The teachers explained that the IPBP helped them to acquire knowledge and skills in class management and the use of indigenous play to teach curriculum contents. The teachers said these successes boosted their morale:

"Before you came in I was just telling a story and asking learners to draw parts of the story that they heard. That was what I was mostly doing. That was basically what we were doing, but now we have been able to link the stories to any other thing; teaching different concepts at the same time like I did yesterday" (P2Int2Q6).

"Now I am okay, because as I teach I also become happy. This time, it is no more chalk and board, but it is real teaching" (P8Int2Q5).

5.4.3.3 Sub-theme 3: Teachers' hopeful expectations

The data revealed that the teachers hoped that the IPBP would be effective. The teachers believed that the IPBP could be a tool for raising Ghana's education system and for cultural revival. The teachers therefore recommended that this pedagogy should be introduced into the entire basic school system and that teachers should be trained for it. These hopeful expectations could account for the change in teaching practice. Below are some of their views:

"Since this play-based approach is helping the children, if the government will bring it as a policy, even up to the JHS level and train teachers based on that, I believe it will help and the education standard in Ghana will change" (P4Int2Q1).

"I suggest this indigenous play-based pedagogy should be introduced to even the JHS level" (P1Int2Q6).

"I think as we have started it, from here the indigenous play will come back. I know the children when they go home they will practice it. This morning when I came to school I saw teacher Afua's (pseudonym) learners doing Pilolo and I said wow. I know the children when they go

home they will introduce it to their friends and sibling and who knows? The indigenous play may come back” (P2int2Q7).

Having presented the pre- and post-programme results, it is important to further define the effectiveness of the IPBPDP by presenting the final evaluation from the perspectives of the teachers who participated in the study and the head teachers of the schools that were included in the study.

5.5 EVALUATION OF THE IPBPDP

According to Guskey (2000:X), the difference between professional development that is effective and that which isn't is that an effective professional development programme is designed to focus “on the content that the teachers teach and the methods they use to teach that content” and must be adequately continued and related to the-day-to-day classroom practices to bring about learning. The IPBPDP was designed around the curriculum content that kindergarten teachers teach and the method (IPBP) through which they teach the content. After the IPBP had been used for more than a year, it was important to evaluate the entire programme from the perspectives of the main stakeholders: head teachers and teachers.

The purpose of evaluating a professional development programme, according to Guyskey (2000) is twofold: firstly, to better understand the programme in order to improve on it, and secondly, to examine the impact of the professional development programme in relation to its intended purpose. The main purpose of evaluating the IPBPDP is to first identify and make recommendations on aspects of the programme that need to be strengthened, and secondly, to examine the usefulness of the IPBPDP in terms of its influence on the teachers' delivery of the KG curriculum and the learners' learning.

I employed Guyskey's (2000) systemic model for evaluating a professional development programme. According to Guyskey, an effective evaluation looks at effects at different levels as well as at the circumstances and procedures that lead to success, and even at information regarding outcomes which were not anticipated. Guyskey proposed a five-level model to evaluate a professional development programme. The model systematically explores the complex factors that interact in

the planning and implementation of a professional development programme. The five levels are the following:

- Level 1 evaluates the participants' reactions to the programme. The focus at this level is on understanding how the participants perceived the quality and usefulness of materials and the manner in which the programme was delivered.
- Level 2 evaluates participants' learning, focusing on how well the participants acquired the intended knowledge, skills and attitudes as a result of their participation in the professional development programme.
- Level 3 evaluates organisational support and change. Here the aim is to examine the extent to which the organisations involved supported the programme to ensure its success. This information provides an explanation of contextual factors that affect the success of a programme.
- Level 4 looks at how the programme affects participants' practice. At this level, evaluation is focused on how the knowledge, skills and attitudes acquired during the programme are used in the actual classroom context.
- The last level pays attention to understanding how the programme affects learners' learning.

To evaluate the IPBPDP, I administered six-item questionnaire to the head teachers and seven-item questionnaire to the kindergarten teachers. The items included both open-ended and closed questions. I received responses from five of the eight teachers. Only two head teachers completed their questionnaires, because the teachers who participated in the study from those schools had left for other schools and the head teachers were therefore unable to determine the success (or otherwise) of the IPBPDP. According to Guyskey's model, the evaluation data collection was particularly successful in understanding participant reaction (level 1), participant learning (level 2), participant use of knowledge and skills (level 4) and the influence of the programme on learners' learning (level 5). Level 3, organisational support and change, was difficult to determine, as only two head teachers' perspectives were gathered.

5.5.1 Participants' reaction

I assessed the teachers' reactions to participation in the IPBPDP at two main levels: during the workshop sessions and after one year of implementation of the IPBP. The initial assessments were done at the end of each workshop session, where I asked each teacher to write what they felt about the workshop and the IPBPDP in general. The information I collected during the workshop sessions indicated that the teachers were happy with the IPBPDP. The teachers particularly mentioned that they liked the workshop sessions, as they were exposed to both the intellectual and practical aspect of implementing an indigenous play-based pedagogy. They referred to the IPDPD as "*an eye-opener*." However, at this initial stage they anticipated that implementing the IPBP was going to be demanding as far as time and materials were concerned. These fears were highlighted again in the responses from the evaluation questionnaires that I administered to the teachers a year after the implementation of the programme.

5.5.2 Participants' learning

I assessed the teachers' learning following their participation in the IPBPDP throughout the capacity building, implementation and post-implementation phases. During the capacity building phase, I assessed the participants' learning informally on a daily basis. At the beginning of each workshop session I discussed the topic of the session with the teachers, after which I provided them with paper on which they wrote their objectives for the session. At the end of the session I asked the teachers to write their reflection, indicating whether their expectations (as stated in their objectives) had been achieved and whether they had learned any new skills and acquired new knowledge. The information the teachers provided about their learning at this initial stage was consistent with the information from the teachers' reflective journals, second interviews (see par. 5.4.2.1) and the responses from the evaluation questionnaire. The teachers stated that they had learnt how to use indigenous stories and games effectively to teach academic concepts in the kindergarten classroom. The information gathered on teachers' learning during the workshop stage evaluation showed that the teachers had also developed a positive attitude towards implementing an indigenous play-based pedagogy due to their participation in the IPBPDP. The teachers clearly stated that they had thought Anansi stories were a thing of the past, but after the workshop they realised they could use Anansi

stories to teach different concepts (see appendix O for examples of participants' evaluation responses).

5.5.3 Participants' use of new skills and knowledge

I assessed the teachers' use of new skills and knowledge by different means. As indicated in par. 5.4, I gathered data on the participants' use of new skills and knowledge through their reflective journals, photovoice, semi-structured interviews and classroom observation to triangulate the data from the other sources. Additionally, the findings from the evaluation questionnaires supported teachers' claims and my observations of the teachers' use of new skills and knowledge. The responses from the evaluation questions showed that the teachers continued to use Anansi stories and other indigenous games when teaching concepts in the classroom. They realised these lessons made teaching easy for them and interesting for the learners. However, the teachers commented that they were unable to implement the IPBP in the kindergarten on daily basis because it took a lot of time to prepare for lessons and to design or collect materials for the lessons. Some of the teachers therefore implemented the IPBP at most three times a week and others only once a month.

5.5.4 Organisational support and changes

My approach to assessing the support that the teachers received from their schools included an evaluation questionnaire that the head teachers responded to. The two evaluation questionnaires returned showed that the head teachers were pleased with the new way the teachers were teaching. They indicated that the teachers now actively engaged learners in lessons and did not teach without resources. The head teachers were pleased that teachers were now making their lessons "practical" by including a lot of play materials which helped children understand concepts better. Both head teachers asserted that the introduction of the IPBP in their schools had reduced absenteeism among the learners, as learners did not want to miss any indigenous play-based lesson. The head teachers therefore requested that the IPBPDP be maintained and expanded to include other teachers as well. This positive attitude and acceptance that was revealed in the evaluation questionnaire was consistent with my experience with the head teachers before the commencement of the study.

Before recruiting the teachers, I personally met with each of the head teachers and discussed the IPBPDP with them in detail. Each of the head teachers was willing to allow their teachers to participate in the study, requesting that I include more teachers from their schools. Their motivation was that they believed the programme was going to help their learners, so they were positively disposed towards its implementation in their schools.

Having said that, it can well be argued that the head teachers' demonstration of positive attitudes and acceptance of the IPBPDP was no guarantee that they provided the necessary support to ensure the successful implementation and continuation of the programme. A face-to-face interview with the head teachers to get deeper insight into the support and changes (if any) they had made to ensure successful programme implementation would have provided a more accurate evaluation of organisational support and change.

5.5.5 Learners' learning outcomes

As indicated in par. 1.4.1, kindergarten teaching and learning in Ghana is aimed at, among other things, developing attitudes and process skills in learners (CRDD, 2004: 1). I therefore did not find it necessary to conduct any formal assessment of learners' learning in order to evaluate the influence of the programme on them; instead, to assess the effect of the programme on the learners' learning outcomes; I asked teachers to document their observation of the learners' reactions to the implementation of the IPBP in their classrooms in the teachers' reflective journals and through photovoice. As indicated in par. 6.3.2, the learners were positively affected by the implementation of the IPBP in their classrooms. Furthermore, the teachers' responses to the evaluation questionnaires showed that the learners were more active in class, asked questions and enjoyed participating in lessons. All the teachers, as well as the head teachers, also commented that the introduction of the IPBP had reduced learner absenteeism. The teachers believed that the learners' recent interest in lessons and school in general was because they had been exposed to lively and interesting lessons.

5.6 CHAPTER SUMMARY

In summary, the results from this study revealed that the use of the indigenous play-based professional development programme enhanced teachers' competencies in the implementation of the kindergarten curriculum. The IPBP proved to be more effective in improving learners' active engagement and interest in lessons than the previous teacher-centred approaches. The results further showed, however, that the teachers did not effectively employ questions to discover children's thinking behind what they moulded, and the teachers also appeared not to want to extend lessons beyond what they had planned to teach; consequently, they missed teaching moments that were present during their interactions with their learners.

In the next chapter, I discuss the findings of the study by comparing them with existing literature. In order to form a holistic view of the discussion I put together the six themes and sub-themes from both the pre- and post-programme findings.

CHAPTER 6

COMPARISON OF THE RESEARCH FINDINGS WITH THE LITERATURE

6.1 INTRODUCTION

In chapter 5, I reported on the results of the study under two headings. First, I presented the pre-programme (diagnostic) results, which focused on teachers' knowledge, beliefs and attitudes towards play-based pedagogy and how these affected their practice. The second section presented the results of the post-implementation data (i.e. the second interviews, observation field notes, photovoice and participants' reflective journals). In this chapter, I summarily compare the research findings with the existing literature about early childhood teachers' professional development programmes and the implementation of the indigenous play-based pedagogy. I emphasise the supportive evidence and contradictions as well as silences and new insights that emerged from this study.

6.2 SUMMARY OF THE LITERATURE AND EMPIRICAL RESEARCH FINDINGS

In order to further analyse and refine the themes and sub-themes and compare them with existing literature, I constructed four tables: supportive evidence (where the findings and existing literature agree), contradictory evidence (where the findings contradict the existing literature), silences that indicate gaps in the literature and new insights that represent the new knowledge and innovation of the current study (Ebersöhn, 2009).

6.2.1 Comparison with existing knowledge: supportive evidence

In Table 6.1, I provide a summary of how existing literature and related theories support the findings of the present study. I interpret each of the similarities with reference to the themes and sub-themes that emerged from the data analysis. I refer to supporting literature cited in the literature review in chapter two that focused on early childhood teacher professional development programmes and indigenous play-based pedagogy. The findings column presents the results from the analyses of interviews, observation field notes, reflective journals and photovoice. In my discussion I list the similarities between literature, the themes and sub-themes.

Table 6.1: Comparison of results and existing knowledge: supportive evidence

Theme and sub-themes	Existing knowledge (literature)	Findings	Interpretive discussions
<p>Theme 1: Play-based pedagogy</p> <p>Sub-theme 1: Knowledge</p> <p>Sub-theme 2: Beliefs</p> <p>Sub-theme 3: Attitudes</p> <p>Sub-theme 4: Approaches</p>	<p>Knowledge: Defining pedagogy</p> <p>Teachers have different definitions of what play-based pedagogy entails (Fesseha & Pyle, 2016).</p> <p>Beliefs</p> <p>Teachers’ beliefs about the value of play to children determine their role in children’s play (Dockett, 2011; Einarsdottir, 2014; Fleer, 2015; Hakkarainen <i>et al.</i>, 2013; Little & Wyver, 2008; Pramling & Carson, 2008). Play promotes learning and children’s holistic development. (Gill, 2015; Healthy Child Manitoba, 2015; Lester & Russell, 2010). Teachers’ practices contradict their beliefs (Devine, Fahie & McGillicuddy, 2013).</p> <p>Approaches</p> <p>Teachers’ knowledge of play-based pedagogy is inconsistent with their</p>	<p>The pre-programme results showed that the participants provided three different definitions of what play-based pedagogy entails: making lessons child-centred, doing a lot of activities and using play to teach concepts (P1int1Q1; P1int1Q1; P5int1Q1).</p> <p>The participants believed that play promotes retention of things learned (P5int1Q2), language and social skills (P4int1Q1) and that children learn as they play (P8int1Q1). The participants further explained that their role in children’s play included supervision to ensure that the children did not harm themselves (P7int1Q3). P8int1Q2, explained further that teachers should not “get too involved in children’s play”. This finding agrees with Fleer’s (2015) study of Australian early childhood educators’ role in children’s play.</p>	<p>The literature confirms that lack of clarity with regard to the definition of play and play-based pedagogy and inadequate or lack of guidance for its implementation make teachers assume that any form of activity-based lesson is a play-based pedagogy.</p> <p>The literature and the findings from the current study confirm that play promotes language, social and communication skills and learning. The literature further agrees that teachers mostly assume a supervisory role in children’s play.</p> <p>The literature confirms that lack of clarity with regard to the definition of play and play-based pedagogy and inadequate or lack of guidance for its implementation make teachers assume that any form of</p>

Theme and sub-themes	Existing knowledge (literature)	Findings	Interpretive discussions
	<p>pedagogical approaches to its implementation in the classroom (Fesseha & Pyle, 2016; Pui-Wah, & Stimpson, 2004).</p>	<p>The findings further revealed that although the teachers had (theoretical) knowledge of what play-based pedagogy entailed, their explanation of their approach to its implementation in the classroom context contradicted what they claimed to know. Confirming the findings of Fesseha and Pyle (2016:363) and Pui-Wah and Stimpson (2004:343), Fesseha and Pyle (2016:363) argue that teachers are unable to implement play-based pedagogy in practice (to reflect based pedagogy in practice (to reflect what they know) because of lack of clarity about play-based pedagogical practices in the curriculum. Hence, the teachers see any activity-oriented practice in the classroom as a play-based pedagogy (Pui-Wah & Stimpson, 2004).</p> <p>Participants' description of a play-based pedagogy includes using play to grab the attention of learners.</p>	<p>activity-based lesson is a play-based pedagogy</p>

Theme and sub-themes	Existing knowledge (literature)	Findings	Interpretive discussions
<p>Theme 2: Factors influencing implementation of play-based pedagogy</p> <p>Sub-theme 1: Initial teacher training</p> <p>Sub-theme 2: Pressure from authorities and parents</p> <p>Sub-theme 3: Curriculum</p>	<p>The factors that influence the implementation of play-based pedagogy in early childhood education include teachers' initial training and pressure from education authorities and parents.</p> <p>Initial training <i>Poor training</i> – initial education that does not expose student teachers to appropriate and adequate in-depth discussions to equip them with relevant competencies for implementing a play-based pedagogy (Cunningham, 2014; Smith, 2015).</p> <p><i>Structure of programme</i> – programmes that do not make room for practical demonstration of theory and do not promote follow-up to ensure effective implementation (Atmore <i>et al.</i>, 2012).</p> <p>Pressure from authorities and parents</p>	<p>Some of the teachers were poorly trained as their training did not include courses on play-based pedagogy (P6int1Q3; P3int1Q5); teachers whose training included play-based pedagogy were either not provided with in-depth teaching (P1int1Q6; P8intQ4) or received inappropriate teaching on play-based pedagogy (P7Int1Q5).</p> <p>The participants experience pressure from education authorities (implementing government policy of accountability) to produce outputs in the form of written exercises. The teachers feared they would not be able to achieve much if they employed play-based pedagogy, since in their view it was time consuming (P1int1Q8; P6int1Q5)</p>	<p>The literature and research show that teachers' inability to implement a play-based pedagogy in the classroom stems from the pedagogy, lacked in-depth discussion and did not give teachers proper theoretical and practical exposure could not equip teachers with relevant competencies to implement a play-based pedagogy.</p> <p>Available literature confirms that government policy that requires kindergarten teachers to produce outputs in the form of formal exercises put teachers under pressure and hence make it impossible for teachers to implement play-based pedagogy</p>

Theme and sub-themes	Existing knowledge (literature)	Findings	Interpretive discussions
	<p><i>Government</i> – constant changes in curriculum demanding teachers to focus more on formal academic work (Brown, 2017; Roberts- Holmes, 2015; Smith, 2015; van Oers, 2014).</p> <p><i>Education authorities, parents, other teachers</i> – Education authorities and parents’ expectation of kindergarten teachers to introduce learners to formal academic work and provide evidence of output of work (Cunningham, 2014; Rose and Rogers, 2012; Wen, Elicker & McMullen, 2011)</p>		
<p>Theme 3: Indigenous play</p> <p>Sub-theme 1: Childhood memories</p> <p>Sub-theme 2: Importance</p> <p>Sub-theme 3: Needs</p>	<p>Children learn as they engage in indigenous play; develop cultural knowledge (Michelet, 2016; UNESCO & ARNEC, 2016).</p>	<p>The teachers performed different indigenous games as children and believed they learnt and developed both physically and socially (P5int1Q8; P1int1Q11; P8int1Q6)</p>	
<p>Theme 4: Indigenous play-based professional development programme</p> <p>Sub-theme 1: Knowledge</p>	<p>Post-programme: Knowledge:</p> <p>Professional development programmes result in teachers’ enhanced content and pedagogical</p>	<p>Knowledge:</p> <p>The teachers indicated that by participating in the IPBPDP they acquired knowledge that enabled them to</p>	<p>Literature and research findings agree that professional development programmes give teachers the opportunity to</p>

Theme and sub-themes	Existing knowledge (literature)	Findings	Interpretive discussions
<p>Sub-theme 2: Beliefs</p> <p>Sub-theme 3: Attitudes</p> <p>Sub-theme 4: Approaches</p>	<p>knowledge; change in attitudes, beliefs and pedagogical practices (Einarsdottir, 2014; Sandholtz & Ringstaff, 2013; Tam, 2015; Schachter, 2015; Wen, Elicker & McMullen, 2011).</p> <p>Teachers' beliefs influence their role in children's play</p>	<p>implement the KG curriculum through IPBP (P1int2Q1; P1int2Q2; P2int2Q2; photograph 5.1).</p> <p>Teachers' beliefs</p> <p>The teachers believed that children learn when they engage in indigenous play. The teachers confirmed their beliefs with a change in the roles they performed in children's play. Instead of just supervising the learners during play, they took part in it, explained the rules of the games, acted as play partners to extend children's play and guided them to learn concepts (photographs 5.2, 5.3, 5.5; P2int2Q2; OFN, 28-03-2017)</p> <p>Attitudes</p> <p>The IPBPDP resulted in teacher-teacher collaboration in teaching; resource mobilisation and design and teachers acting as co-learners.</p> <p>Approaches</p>	<p>enhance the content and pedagogical knowledge needed for implementing a play-based pedagogy.</p>

Theme and sub-themes	Existing knowledge (literature)	Findings	Interpretive discussions
		<p>The pedagogical approaches of the teachers changed after the IPBPDP. They used indigenous play; hands-on- activities such as moulding and drawing; dramatisation, role play, video and outdoor spaces (photographs 5.7, 5.8, & 5.9; P8RJ; P6int2Q1; OFN, 28-03-2017).</p>	
<p>Theme 5: Indigenous play-based pedagogy: Influence on learners</p> <p>Sub-theme 1: Agency</p> <p>Sub-theme 2: More interest</p> <p>Sub-theme 3: Imagination and active construction of knowledge</p> <p>Sub-theme 4: Holistic development</p>	<p>Indigenous play-based pedagogy: an approach to implementing kindergarten curriculum content by the use of indigenous play forms as the main context of learning to promote teaching, learning and development (Abdulai, 2016; Agbenyega, Tamakloe & Klibthong, 2017; Onwauchi, 1972; UNESCO & ARNEC, 2016).</p> <p>Outdoor learning experiences Children experience outdoor learning (Ng’asike, 2014; Ogunyemi, 2016; UNESCO & ARNEC, 2016).</p>	<p>The findings show that the teachers used indigenous Anansi stories and games to teach kindergarten curriculum concepts such as two- and three-letter words (P2int2Q1 & RJ).</p> <p>The teachers used outdoor spaces for teaching and learning activities (photographs 2.4, 2.5, 5.6, 5.10; P8int2Q2)</p> <p>The teachers selected topics from the curriculum, then chose an appropriate story or game and planned the lesson accordingly.</p> <p>The Anansi stories and games teachers employ to implement the IPBP provide</p>	<p>Teachers should be encouraged to use both outdoor and indoor spaces to give learners the opportunity to experience learning in different environments.</p> <p>Kindergarten teachers should include readily available resources and materials in their lessons.</p> <p>Literature and research confirm that for teachers to achieve academic goals through play, they need to plan for and guide learners to learn concepts through play.</p> <p>Literature and research agree that indigenous play-based pedagogy</p>

Theme and sub-themes	Existing knowledge (literature)	Findings	Interpretive discussions
	<p>Teachers purposively plan The teachers plan for and actively participate in the play in order to guide learners in learning curriculum concepts in fun and interesting ways (Abdulai, 2016; Agbenyega, Tamakloe & Klibthong, 2017 UNESCO & ARNEC, 2016).</p> <p>Promotes holistic development of children Indigenous play-based pedagogy fosters imagination and higher-order thinking in children (Abdulai, 2016; Agbenyega, Tamakloe & Klibthong, 2017); and language, social physical, moral and cognitive skills (Abdulai, 2016; Agbenyega, Tamakloe & Klibthong, 2017; Gelisli & Yazici, 2015; Holmes, Romeo, Ciraola & Grushko, 2015; UNESCO & ARNEC, 2016:31).</p>	<p>children with the opportunity to develop and expand their imagination and critical thinking skills (P8int2Q3; P8int2Q4). Through the IPBP children develop socially and emotionally (P6int2Q2; P1int2Q4).</p>	<p>promotes children's holistic development.</p>
Theme 6:	Learner factors: Changes in learners' behaviour and their learning	Teachers' personal factors:	The results of the current study agree with existing knowledge that

Theme and sub-themes	Existing knowledge (literature)	Findings	Interpretive discussions
<p>Possible explanations for changes in teachers' practices</p> <p>Sub-theme 1: Learner-factors</p> <p>Sub-theme 2: Teacher personal-factors</p> <p>Sub-theme 3: Teachers' hopeful expectations</p>	<p>outcome result in teachers' change in practice (Kriek Grayson, 2009; Onwu & Mogari, 2004).</p>	<p>Professional development programmes improve teachers' content knowledge, pedagogical practices, instructional approaches and professional attitudes (Einarsdottir, 2014; Kriek & Grayson, 2009; Sandholtz & Ringstaff, 2013; Schachter, 2015; Tam, 2015; Wen, Elicker & McMullen, 2011).</p>	<p>teachers' knowledge, beliefs and professional attitudes changed after their participation in the IPBPDP, and this could explain the change in teaching practices indicated in the findings.</p>

(Adapted from Ebersöhn, 2009)

As shown in Table 6.1, findings of the current study agree with existing literature regarding teachers' knowledge, beliefs, attitudes and practices of a play-based pedagogy. The findings show that prior to the teachers' participation in the indigenous play-based professional development programme, their knowledge of what play-based pedagogy entailed varied. Their knowledge was consistent with their practice of what they thought play-based pedagogy meant. The teachers never used play as a context for delivering the curriculum content; instead, the teachers' descriptions of their actual classroom practices of a play-based pedagogy revealed that the teachers mostly employed any play-related activities such as singing, dancing and recitation of rhymes during lessons to get the attention of learners.

Consistent with existing literature, the teachers blamed their initial training, deficient curriculum and pressure from education authorities as contributing to their inability to implement a play-based pedagogy. The pre-programme interview data revealed a divergent perspective on these issues.

Regarding the teachers' initial training, for example, half of the teachers indicated that their initial training did not include any training on play-based pedagogy. Others admitted that their initial training included some courses on play-based pedagogy, however, the tuition was shallow and hence could not equip them adequately with the relevant competencies to be able to implement a play-based pedagogy.

In Ghana, the minimum qualification for a kindergarten teacher is a three-year diploma in basic education or early childhood education. In the current study, two of the teachers (P2 & P7) had diplomas in basic education; P5 & P8 had diplomas in ECE; three teachers (P3, P4 & P6) had bachelor's degrees in basic education. Only one teacher (P1) had a bachelor's degree in ECE. The Table 6.2 below summarises the teachers' qualifications.

Table 6.2: Qualification of the teachers

Qualification	ECE	Basic Education	Percentage
Diploma	2 (P5 & P8)	2 (P2 & P7)	50
Degree	1 (P1)	3 (P3,P4, & P6)	50
Percentage	37.5	62.5	100

It is evident from the findings that the teachers who had qualifications in ECE (P1, P5 & P8) had been exposed to some tuition on play-based pedagogy during their initial training, except that they felt their lecturers failed to give them in-depth training enabling them to implement a play-based pedagogy. On the other hand, the teachers who had bachelor's degrees in basic education (P3, P4 & P6) explicitly stated that their initial training did not include courses on play-based pedagogy; however, their counterparts (P2 & P7) who had diplomas in the same qualification (basic education) noted they had received training in play-based pedagogy. However, one teacher's (P7) explanation of play-based pedagogy in practice (that it was a means for gaining attention), as exemplified in P7int1Q1, was consistent with the kind of training she claimed to have received. According to P7int1Q6 "... *the teachers who taught us, when they come to class they perform some play that make us dance and that makes us happy.*"

It can be concluded that neither the teachers who claimed that their initial training included tuition in play-based pedagogy nor those who claimed not to have any such training could demonstrate proper knowledge of the implementation of a play-based pedagogy in the classroom. The teachers traced their problems back to their respective training programmes (basic education teachers had no training in play-based pedagogy and ECE teachers' training in play-based pedagogy had been inadequate).

As noted in the literature review in chapter two, the literature confirms that early childhood teacher training institutions are struggling to develop programmes capable of producing well-trained teachers equipped with the skills needed to implement play-based pedagogy (Cunningham, 2014). Smith (2015) confirms that the training of early childhood teachers in play-based pedagogy is too shallow.

As regards teachers' beliefs and attitudes towards play-based pedagogy, the pre-programme interviews revealed that all the teachers believed that play promotes social and language skills, active child participation, understanding and the retention of things children learn (Gill, 2015; Healthy Child Manitoba, 2015; Lester & Russell, 2010); and that children learn when they play (Makaudze & Gudhlanga, 2011; Pramling & Carlson, 2008). The findings also showed that the teachers believed that their role in children's play included watching, guidance, provision of materials and

supervision. The majority (7) of the teachers indicated that they supervised the children during play to ensure the children did not sustain injuries.

Existing literature indicates that teachers' theorisation of play influences their beliefs and practice (Dockett, 2011; Einarsdottir, 2014; Fleer, 2015; Hankkerainen *et al.*, 2013; Little & Wyver, 2008; Pramling & Carson, 2008). According to Dockett (2011:35), teachers who support the Piagetian constructivist approach to learning (i.e., see children as active constructors of knowledge through their interaction with the environment and peers) assume a "reactive role" towards children's play, with the teachers waiting for the children to start the play experience. As discussed in the literature review (par. 2.5), such teachers in practice usually watch, observe or facilitate play.

It is evident from the findings of the current study that, based on the roles they claimed they performed in children's play, most of the teachers define play in terms of the Piagetian constructivist perspective instead of a cultural-historical perspective. As pointed out in the literature, such theorisation (Piagetian constructivist perspective) of children's play would be challenged, considering the ever-increasing call for introducing young children to academic concepts in the Ghanaian kindergarten context.

The cultural-historical theorisation of play emphasises an adult mediation role through active participation in children's play, which helps the children to develop the skills of abstraction and deliberate thinking about content knowledge – skills which are relevant for numeracy and language and literacy work as required by the KG curriculum (Fleer, 2013; Fleer, 2011). The literature confirms that by employing strategies such as communication, questioning and answering, scaffolding and participating in children's play, teachers are able to help children enjoy complex forms of play and consequently promote learning of concepts (Bodrova, 2008; Dockett, 2011; Fleer, 2015; Li, 2013).

6.2.2 Comparison with existing knowledge: contradictory evidence

In Table 6.3, I present a summary of how existing literature contradicts the findings from the research study. I discuss each contradiction against the themes and respective sub-themes that emerged from the data analysis. I refer to the existing

literature that contradicts these findings, as presented in the literature review in chapter two, which focused on play-based pedagogy, early childhood teachers' professional development and indigenous play-based pedagogy with findings from the present study. The column with the findings refers to the findings from the analysis of the semi-structured interviews, observation field notes, photovoice and teachers' reflective journals. I discuss and interpret the relevant themes and sub-themes that applies here in the interpretive discussion column.

Table 6.3: Comparison of results with existing knowledge: contradictory evidence

Themes and sub-themes	Existing knowledge (literature)	Findings	Interpretive discussion
Theme 1: Play-based pedagogy Sub-theme 1: Knowledge Sub-theme 2: Beliefs Sub-theme 3: Attitudes Sub-theme 4: Approaches	Formal assessment of children's learning through play-based pedagogy includes photographs, video and audio recording and examples of children's work (Ministry of Education, 2017).	The pre-programme interview result revealed that the teachers thought implementing a play-based pedagogy would not allow them to assess children's learning in a manner that provided evidence for the parents and the education authorities (P1int1Q8; P5int1Q6).	Kindergarten teachers should be exposed to different approaches to formally assess children's learning through a play-based pedagogy.
Theme 2: Factors influencing implementation Sub-theme 1: Initial teacher training Sub-theme 2: Curriculum Sub-theme 3: Pressure from authorities and parents	Curriculum A play-based curriculum allocates adequate time to children's play and learning through exploration and discovery	The Ghanaian curriculum allocates only half an hour to a lesson, which is inadequate for implementing a play-based pedagogy (P1int1Q8; P6int1Q4)	Kindergarten teachers should plan their play-based lessons in such a manner that they can continue if they are unable to finish within the stipulated time.
Theme 3: Indigenous play Sub-theme 1: Childhood memories Sub-theme 2: Importance Sub-theme 3: Teachers' needs	African children's play is closely linked to their family and communities' livelihood. As children play, they acquire knowledge, skills and attitudes	The teachers needed training that emphasised indigenous play-based pedagogy to be able to facilitate children's learning and development through indigenous play (P8int1Q7; P7int1Q6; P5int1Q9)	Kindergarten teachers should not take it for granted that children learn and develop through participation in indigenous play. Teachers need to facilitate children's learning and development through indigenous play.

Themes and sub-themes	Existing knowledge (literature)	Findings	Interpretive discussion
<p>Theme 4: Indigenous play-based professional development programme Sub-theme 1: Knowledge Sub-theme 2: Beliefs Sub-theme 3: Attitudes Sub-theme 4: Approaches</p>	<p>Teachers acquire knowledge, skills and attitudes through their participation in a professional development programme (Onwu & Mogari, 2004; Kriek & Grayson, 2009).</p>	<p>The findings show that the teachers' prior knowledge, experiences and positive attitudes towards indigenous play provided the foundation for their acquisition of the relevant competencies in the IPBPDP</p>	<p>Professional development programmes must not only focus on teachers' immediate needs, but also include their knowledge and experience of indigenous play as well as provide opportunities for teachers to practice their learned skills, knowledge and ideas and receive feedback for further improvement.</p>
<p>Theme 5: Indigenous play-based pedagogy: influence on learners Sub-theme 1: Agency in learning Sub-theme 2: More interest in lessons Sub-theme 3: Imagination and active Construction of knowledge Sub-theme 4: Holistic development</p>	<p>Professional development programmes result in children's change in behaviour (Onwu & Mogari, 2004; Kriek & Grayson, 2009).</p>	<p>Children's change in behaviour is a result of their interest in the implementation of the indigenous play-based pedagogy.</p>	<p>Children do not change in behaviour only because their teachers have acquired new knowledge, skills and ideas. Children change because they find their teachers' new approaches to instruction and interacting with them fascinating, empowering and enjoyable.</p>
<p>Theme 6: Possible explanations for changes in teachers' practice</p>	<p>Changes in teachers' practice are attributed to changes in the behaviour of learners (Onwu &</p>	<p>The teachers' observations and experiences of the influence of the</p>	<p>Teachers hope that the influence of the IPBPDP on the greater education sector</p>

Themes and sub-themes	Existing knowledge (literature)	Findings	Interpretive discussion
Sub-theme 1: Learner factors Sub-theme 2: Teacher factors Sub-theme 3: Teachers' hopeful expectations	Mogari, 2004; Kriek & Grayson, 2009.)	implementation of the IPBP explain teachers' change in practice.	will motivate teachers to adopt a professional development programme.

(Adapted from Ebersöhn, 2009)

6.2.3 Comparison of results with existing knowledge: silences in the literature

Table 6.4 lists the silences in the literature with reference to aspects that emerged from the data analysis and were indicated in the findings, but were not initially included in the review of the literature review in chapter two. The table has three columns only. The findings column indicates the results from the analysis of the interviews, observation field notes, photovoice and participants' reflective journals. The column for the interpretive discussion looks at the silences in the present literature.

Table 6.4: Comparison of results with existing knowledge: silences in the literature

Themes and sub-themes	Findings	Interpretive discussion
<p>Theme 1: Play-based pedagogy</p> <p>Sub-theme 1: Knowledge</p> <p>Sub-theme 2: Beliefs</p> <p>Sub-theme 3: Attitudes</p> <p>Sub-theme 4: Approaches</p>	<p>Teachers do not consider the curriculum as a source of information on its implementation.</p>	<p>Kindergarten teachers need to understand that the curriculum is designed to provide them with knowledge regarding its implementation.</p>
<p>Theme 2: Factors influencing implementation</p> <p>Sub-theme 1: Initial teacher training</p> <p>Sub-theme 2: Curriculum</p> <p>Sub-theme 3: Pressure from authorities and parents</p>	<p>Different early childhood programmes produce the same teacher quality.</p> <p>Although most of the teachers had overcrowded classrooms, they did not mention class size as a factor that determined how they implemented the kindergarten curriculum.</p> <p>The teachers thought implementing a play-based pedagogy meant they could not assess learners' lessons and provide education authorities with evidence of output of work</p>	<p>Initial teacher training should be synchronised to ensure that every pre-service teacher receives training in play-based pedagogy.</p> <p>Class size needs to be considered in the planning for indigenous play-based lessons.</p>
<p>Theme 3: Indigenous play</p> <p>Sub-theme 1: Childhood memories</p> <p>Sub-theme 2: Importance</p>	<p>The pre-programme interview revealed that although all the teachers had memories of their childhood play, they still could not implement a play-based pedagogy prior to their participation in the IPBPDP (P5int1Q7; P3int1Q6; P1int1Q10; P5int1Q6).</p>	<p>The existing literature, as presented in chapter two, is silent on how teachers' memories of their childhood play influence the way they practice a play-based pedagogy. Authorities that are responsible for designing teacher professional development programmes should focus on</p>

Themes and sub-themes	Findings	Interpretive discussion
Sub-theme 3: Teachers' needs	Although the teachers had memories of indigenous childhood play, they could not use those play experiences to implement the KG curriculum until they were trained in the relevant skills, knowledge and attitudes.	including teachers' childhood experiences of play in the professional development programme to make them aware that their prior knowledge and experiences are valued The teachers' memories of indigenous play should form the basis of training the teachers in the IPBP
Theme 4: Indigenous play-based professional development programme Sub-theme 1: Knowledge Sub-theme 2: Beliefs Sub-theme 3: Attitudes Sub-theme 4: Approaches	By employing Anansi stories and other Ghanaian indigenous play activities to train kindergarten teachers, the teachers acquired the relevant knowledge, skills and attitudes for implementing the KG curriculum.	The IPBPDP should be integrated into the Pre-Tertiary Teacher Professional Development and Management in Ghana policy framework of the Ministry of Education to help train kindergarten teachers to acquire the competencies required for planning and implementing the IPBP in the KG context.
Theme 5: Indigenous play-based pedagogy: influence on learners Sub-theme 1: Agency in learning Sub-theme 2: More interest in lessons Sub-theme 3: Imagination and active construction of knowledge Sub-theme 4: Holistic development	Children's interest in teachers' new practices caused children to participate in lessons. Indigenous play-based pedagogy helps learners develop in all domains	Kindergarten teaching and learning should involve activities and approaches (such as Anansi stories, dramatising Anansi stories, moulding and drawing) that children find interesting. As children find their lessons interesting, they participate in them; in the process they develop psycho-social skills, moral values and knowledge of their culture.
Theme 6: Possible explanations for changes in teachers' practice Sub-theme 1: Learner-factors	The teachers adopted the IPBPDP and recommended that other teachers be trained in it, because they believed it could enhance teachers'	Professional development programmes for kindergarten teachers must endeavour to include teachers' critical evaluation of the strengths and

Themes and sub-themes	Findings	Interpretive discussion
<p>Sub-theme 2: Teacher-factors</p> <p>Sub-theme 3: Teachers' hopeful expectations</p>	<p>knowledge, skills and attitude and make kindergarten education more effective.</p>	<p>challenges of the programme to ensure it is adopted and sustained.</p>

(Adapted from Ebersöhn, 2009)

6.2.4 Comparison of results with existing knowledge: new insights

Table 6.5 presents the new insights or knowledge that emerged from the findings of the current study. In the first column, I list the themes and sub-themes that emerged from data collection and analysis. In the description column I present a detailed explanation of the new insights. The last column provides the context within which I present an interpretative discussion of the newly gained insights with reference to the development and implementation of the indigenous play-based professional development programme.

Table 6.5: Comparison of results with existing knowledge (literature): new insights

Themes and sub-themes	Description	Interpretive discussion
<p>Theme 1: Play-based pedagogy</p> <p>Sub-theme 1: Knowledge</p> <p>Sub-theme 2: Beliefs</p> <p>Sub-theme 3: Attitudes</p> <p>Sub-theme 4: Approaches</p>	<p>Prior to teachers' participation in the IPBPDP, kindergarten teachers were not aware that the Ghanaian kindergarten curriculum expected them to employ a play-based pedagogy in the kindergarten context.</p>	<p>Teachers need to be exposed to the kindergarten curriculum in order to understand the recommended instructional approach (play-based).</p>
<p>Theme 2: Factors influencing implementation</p> <p>Sub-theme 1: Initial teacher training</p> <p>Sub-theme 2: Curriculum</p> <p>Sub-theme 3: Pressure from authorities and parents</p>	<p>Although the existing literature shows that the lack of clarity on play in the curriculum makes it difficult for teachers to implement a play-based curriculum, the findings of the current study revealed that the majority of the teachers did not even know the curriculum required them to implement a play-based pedagogy in the kindergarten. It is therefore not possible to say whether inefficiencies in the curriculum were responsible for teachers' inability to implement a play-based pedagogy.</p>	<p>All the teachers in the study were qualified kindergarten teachers who possessed copies of the KG curriculum. If they did not know that the curriculum expected them to implement a play-based pedagogy, it could only mean the teachers' attitude towards the curriculum was the problem and not the lack of clarity in the curriculum, although that would have been a factor as well.</p>
<p>Theme 3: Indigenous play</p> <p>Sub-theme 1: Childhood memories</p> <p>Sub-theme 2: Importance</p> <p>Sub-theme 3: Teachers' needs</p>	<p>The teachers applied their childhood play experiences in meaningful ways to implement the kindergarten curriculum only after they had been trained to do so. Teachers' training should include:</p> <ul style="list-style-type: none"> • Discussion, demonstration and teaching of different indigenous play forms such as Anansi stories, Ampe, Nana wo ho, Bankyema kakro and Anhwe akyire; 	<p>Early childhood teacher professional development programmes must focus on training teachers on how to plan meaningful indigenous play-based lessons for the kindergarten children. The pre-tertiary professional development management policy framework has to be reviewed to include specific training on indigenous play-based pedagogy.</p>

Themes and sub-themes	Description	Interpretive discussion
	<ul style="list-style-type: none"> • Emphasis on using Anansi stories and other indigenous games for teaching curriculum concepts such as number names, parts of the body and imaginative drawing; • How to plan, organise and design resources for implementing an IPBP; • The importance of exploratory, discovery and imaginative activities within different play and learning spaces; • How teachers' can make use of parents and other elderly community members as resource persons in their lessons to narrate Anansi stories and teach other indigenous games to both teachers and learners. 	
<p>Theme 4: Indigenous play-based professional development programme</p> <p>Sub-theme 1: Knowledge</p> <p>Sub-theme 2: Beliefs</p> <p>Sub-theme 3: Attitudes</p> <p>Sub-theme 4: Approaches</p>	<p>The IPBPDB equipped teachers with the knowledge of, skills in and ideas for applying conceptual play to Anansi stories in delivering the kindergarten curriculum.</p> <p>The teachers developed attitudes of cooperation, resourcefulness, creativity and self-reflection.</p> <p>Teachers authenticated their beliefs regarding children learning through play and actively participated in children's play.</p> <p>Teachers used both outdoor and indoor spaces creatively to implement the IPBP.</p>	<p>A kindergarten teacher professional development programme that focuses on enhancing teachers' theoretical and practical knowledge, skills and attitude for implementing a play-based pedagogy helps teachers acquire relevant competencies for kindergarten teaching and learning. Pre-service training should include topics such as integrating the conceptual play into Ghanaian indigenous play.</p>

Themes and sub-themes	Description	Interpretive discussion
<p>Theme 5: The indigenous play-based pedagogy: influence on learners</p> <p>Sub-theme 1: Agency</p> <p>Sub-theme 2: More interest in lessons</p> <p>Sub-theme 3: Imagination and active construction of knowledge</p> <p>Sub-theme 4: Holistic development</p>	<p>The implementation of the IPBP in the kindergarten increases children's interest in lessons, making them focus on a task until completion. Learners' disruptive behaviours, such as giving excuses to go to the washroom, drink water or just loiter around during lessons were completely absent during lessons. Learners no longer stayed away from school</p> <p>Besides developing in all domains (cognitive, social, emotional and physical), children develop morally. The Anansi stories taught children moral lessons such as friendship, tolerance, respect for others and hard work.</p>	<p>The implementation of the IPBP in the kindergarten context appears to have an 'in-built self-regulative mechanism' for keeping learners active, eager and interested in lessons.</p> <p>The children find the Anansi stories, games and the hands-on activities which accompanied the stories interesting and hence need no longer be controlled by teachers during lessons. As presented in 5.6.5, the implementation of the IPBP in the kindergartens has since reduced absenteeism among the learners.</p> <p>Kindergarten education must focus on preparing children with life-long values and not with academic skills only.</p>
<p>Theme 6: Possible explanations for changes in teachers' practice</p>	<p>Teachers' hopeful expectation about the potential implementation of the indigenous play-based pedagogy as a vehicle for improving the educational standards in the kindergarten and the entire basic school system encouraged teachers to adopt the pedagogy and further recommends its inclusion in the basic school curriculum.</p>	<p>The indigenous play-based pedagogy needs to be integrated not only into the kindergarten curriculum, but into the entire basic school curriculum, and teachers should be trained to implement it, as teachers view the IPBP as a way towards a better education and a national revival of indigenous play.</p>

(Adapted from Ebersöhn, 2009)

6.3 BRIEF OVERVIEW OF THE EMPIRICAL RESEARCH FINDINGS OF THE CURRENT STUDY

The following findings were made in this empirical research:

- Prior to the teachers' participation in the IPBPDP, the teachers had various views of play-based pedagogy. These views were expressed in the way the teachers employed play-based pedagogy in the classroom. The teachers considered any play activities, such as singing and dancing, as implementing a play-based pedagogy.
- Prior to the teachers attending the IPBPDP, the teachers used play mostly for grabbing attention.
- Although the teachers believed that children learn when they play, they did not use play as a context for delivering the kindergarten curriculum. The teachers complained that they were not well trained to implement a play-based pedagogy.
- Prior to the teachers' participation in the IPBPDP, it was clear that the teachers had experience of childhood play, but could not use it to deliver the kindergarten curriculum. The teachers explained that they did not know which particular game to use for teaching a given concept.
- Until the teachers participated in the IPBPDP, the instructional approaches the teachers used to deliver the kindergarten curriculum included direct instruction, demonstration with familiar objects and lectures.
- After participating in the IPBPDP, the teachers had the knowledge, skills and attitudes that enabled them to apply the elements of conceptual play to indigenous Anansi stories and other games to implement the IPBP. The teachers used locally available resources and materials that they designed or collected from the school environment or from their homes for their lessons.
- Having taken part in the IPBPDP, the teachers delivered the kindergarten curriculum through child-centred indigenous play-based approaches such as the dramatisation of Anansi stories, role playing, discussions, moulding with clay and play dough and drawing. The teachers also used different spaces such as dramatising a forest scene in a nearby forest or playing Nana wo ho under trees on the school compound.

- The teachers changed in the way they interacted with their learners in the classroom. The teachers no longer saw themselves as the 'owners' of knowledge who needed to 'pour' their knowledge into the learners; they became co-learners with their learners. The teachers were open to the learners' construction of knowledge and allowed children to contribute to their own learning.
- Through the implementation of the IPBP, the learners became more interested in lessons and did not give excuses to be outside the class during lessons. They even sometimes forfeited their break time to complete a task such as moulding characters from a story they had heard during the lesson.
- The learners actively participated in lessons and were willing to ask or answer questions. They actively tried alternative strategies to complete tasks, in the process developing skills such as cooperation, taking turns, tolerance, experimentation, problem solving, negotiation, leadership and conflict resolution. The different indigenous games that the children participated in during lessons helped children to be assertive and express their feelings.
- The teachers expressed their acceptance of the IPBPDP by recommending its inclusion in the kindergarten curriculum and the training of teachers to implement the IPBP throughout the entire basic school level in Ghana.

6.4 CHAPTER SUMMARY

In this chapter I presented the research findings in four categories. I presented the findings that confirm existing knowledge and those that contradict it. In the process, I identified the silences in the literature and highlighted the new insights.

In the next chapter, I present my reflections of the chapters and draw conclusions as I answer the secondary and primary research questions.

CHAPTER 7

REFLECTIONS, CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

7.1 INTRODUCTION

In chapter six I presented the findings and compared them with existing literature. In the first section, I focused on the findings that are similar to existing ones. I also presented contradictory findings, silences and new insights that were identified in the current study. Chapter seven, the final chapter, commences with a reflection on the previous six chapters and then relates the conclusions of the study to the primary and secondary questions. The chapter continues with a discussion of the limitations of this study. I conclude the chapter with a number of recommendations which are based on the findings of this study.

7.2 REFLECTIONS ON EACH OF THE PREVIOUS SIX CHAPTERS

Chapter one presented the overview and rationale of the study, its background, context and objectives.

Chapter two presented a detailed synthesis of the literature relating to indigenous play-based professional development. As a point of departure, I explored the literature on play and play-based pedagogies from global perspectives. Furthermore, I examined different models of early childhood teacher professional development programmes across the world and identified critical components relevant to the current study. The chapter also presented the conceptual framework of the study; explaining relevant concepts and how they are applicable to the current study. The aim of the conceptual framework was to help with the designing of the IPBPDP and consequent implementation of the IPBP (data analysis).

Chapter three focused on the detailed description of the participatory action research design and methodology employed in this study. The primary participants were eight kindergarten teachers. The data was collected from semi-structured interviews, classroom observations, photovoice and reflective journals. Member checking was employed as a key measure for ensuring trustworthiness, which was enhanced by data triangulation. The study was foregrounded on ethical principles such as confidentiality, anonymity, voluntary consent and participation and documentation of the findings.

In chapter four, a detailed discussion of the development of the IPBPDP, emphasising the four phases was presented as well as the rationale and activities involved in each phase. The chapter further presented a modelled lesson in which conceptual play and indigenous play were integrated.

Chapter five reported on the data analysis processes and the results of the study in two sections, namely pre-programme and post-programme results. For each of the (pre and post-programme) results, three themes and several sub-themes emerged. The themes that emerged from the pre-programme results include play-based pedagogy, factors influencing implementation and indigenous play-based programme. The post-implementation results include the indigenous play-based programme, the influence of the implementation and possible factors responsible for changes in teachers. Through the observations and the photovoice I was able to triangulate the data from the interviews.

Chapter six presented a discussion of the findings in comparison with the literature. The comparisons were organised in four sections. The first section focused on literature that supports findings from the current study, the second section looked at literature that contradicts findings from the current study and the third section explored the silences that exist in the literature, but not in the findings. The last section addressed new insights related to the findings and literature.

This chapter presents the conclusions, limitations and recommendations related to the findings of this study.

The next section presents the summary of the conclusions of the study by answering the research questions.

7.3 CONCLUSION

I present the conclusion by answering the research questions, starting with the first secondary research question.

7.3.1 Secondary research question 1:

What prior knowledge, beliefs and attitudes do kindergarten teachers have about play-based pedagogy and how do these affect their practice?

Kindergarten teachers defined play-based pedagogy as involving the use of activities or play to teach concepts or making learning child-centred in the kindergarten classroom. The teachers explained that they employed a variety of approaches such as singing, dancing, recitation of rhymes and demonstrations with familiar objects to implement a play-based pedagogy in the classroom.

As is evident from the findings (see 5.3.1.5), some of the teachers who claimed that they implemented play-based pedagogy in the classroom, explained that they taught concepts such as numbers by bringing objects to the classroom, calling out a specific number and asking the learners to pick the corresponding number of objects. Another teacher described how she used role-play when teaching the topic “sources of water”, but it turned out from the teacher’s description that she was the sole person playing any role; the learners were passively observing, which made the lesson teacher-centred as opposed to child-centred (child-centeredness being a characteristic of play-based pedagogy). The teachers assumed that by employing activities and using teaching aids in a lesson, they were implementing a play-based pedagogy.

My review of the KG curriculum (see par. 1.3.1) revealed a ‘false consistency’ between the approaches the teachers adopted to implement the curriculum to the structure of the curriculum. The curriculum explicitly requires teachers to employ a play-based pedagogy, but lacks clarity relating to what and how the teachers could do this. The teachers pointed out that due to this lack of guidance, they implemented the play-based pedagogy the way they knew (or could).

Although the teachers believed that play-based pedagogy promotes active child participation, understanding and retention of things children learn and that children learn as they play, the teachers thought ‘teaching’ should be separated from playing. In other words, playing should only be allowed within teaching to get children’s attention; hence they neither joined in children’s play nor made any deliberate effort to support learning. The teachers thought that the children would learn automatically as they played, so the teachers mostly merely supervised children during play to make sure the children were safe.

As teachers' knowledge, beliefs and attitudes towards play-based pedagogy influenced the way they implemented it, they did not use play as a means of implementing curriculum content, but rather used play as attention grabber. Several reasons could explain this situation. A key factor is the initial training the teachers received. This training fell into three categories: some were trained in play-based pedagogy on a shallow level, others did not have training in play-based pedagogy at all and others' training in play-based pedagogy was inappropriate. All of these forms of training proved incapable of equipping the teachers with the relevant competencies for implementing a play-based pedagogy.

For example, the teachers who claimed to have had some training in a play-based pedagogy explained that their training (in play-based pedagogy) included using some form of play activity such as singing and dancing to make them happy. Therefore, these teachers also used play in a similar manner in the kindergarten classroom; they made children sing, dance and recite rhymes (to get the attention of the learners) and considered those play-like activities as a play-based pedagogy. Although the teachers had experience of childhood play and were well aware of the potential of indigenous play for implementing the KG curriculum, they needed to be properly trained to acquire the necessary knowledge, skills and attitudes. It is against this backdrop that the development of an indigenous play-based professional development programme is recommended.

7.3.2 Secondary research question 2

How can the indigenous play-based professional development programme be used to enhance teachers' knowledge, attitudes, beliefs and practices?

The indigenous play-based professional development programme (IPBPDP) enhanced teachers' knowledge, attitudes and practices in various ways. In terms of knowledge, the teachers used indigenous play such as Anansi stories, Nana wo ho, Anhwe akyire and Pilolo in different manner. They applied the elements of conceptual play (creating imaginary situations, rising to the concrete and systems of concept) to selected indigenous games in order to teach curriculum concepts. They systematically planned and implemented an indigenous play-based pedagogy (IPBP) in the classroom. By employing an Anansi story, for example, the teachers were able to create imaginary situations within which children's conceptual

formation as well as development was facilitated. The teachers employed several hands-on and child-centred approaches such as moulding, drawing, dramatisation, role play, questions and answers, and small group activities to implement the IPBP. Through the IPBP the teachers explored different curriculum topics such as “position/location” (CRDD, 2004:31) and “number names 1-5” (CRDD, 2004:94). In one of the lessons that I observed, the teacher used an Anansi story to teach the ‘parts of the body’ to five-year-olds. She narrated the story (with appropriate gestures), followed by a discussion of the story, then dramatisation and finally moulding with clay. The teacher provided the learners with props and materials such as a cooking pot, a paddle, a knife, corn flour (maize meal) and a calabash, and clay to mould. The lesson proceeded systematically, with each activity reinforcing intended concepts. The activities, in addition to teaching the curriculum concepts ‘parts of the body’, were planned to foster communication, social, cognitive, gross and fine motor development. The success of this lesson could partly be explained by the amount of preparation the teacher needed to do. The teachers’ pre-lesson planning activities included choosing an appropriate storyline for the selected topic, after which she wrote a lesson plan. To ensure children’s active participation in the lesson, the teacher then organised socio-culturally relevant materials and props, most of which she simply collected from her own home and the school environment.

In related cases, the teachers demonstrated improved competence in setting up different seating arrangements, both indoors and outdoors. In the classroom, the teachers placed the learners in semicircles, while the teachers sat or stood facing the learners, or the learners sat or stood in small groups around tables when they were engaged in group tasks. These group activities gave learners the opportunity to share materials such as clay or play dough for their tasks. The learners communicated among themselves, argued and tried alternative ways of accomplishing tasks assigned to them as groups.

The teachers frequently used outdoor spaces for different purposes. In one school the teacher drew a Nana wo ho game in the sand under shady trees. In a second school, the teacher organised the learners to dramatise a forest scene in the teak trees just opposite the school compound. In the third school, the teacher used the large open space for conducting Pilolo (a running game) for the learners. Teachers

did not only use the outdoor spaces for physical activities; some also explored numeracy and language and literacy activities outdoors.

In one instance, the teacher took the learners for a walk outdoors, where each of the learners picked up one object to represent the concept 'one', which they had learned in an Anansi story earlier in the classroom. The children collected objects such as stones, leaves and sticks. Through such an experience the learners developed skills such as observation, curiosity, thinking, problem solving, imagination, communication and knowledge of the environment, some of which are the aims of the KG curriculum.

The teachers' attitudes towards the implementation of the IPBP after the IPBPDP confirmed their belief in the value of play in the lives of the learners. The active participatory roles that the teachers assumed in children's play affirmed their social-cultural belief (perspective) that children learn as they play with the involvement of teachers (adults). The interactions the teachers had with the learners during IPBP learning sessions demonstrated teachers' improved knowledge and attitudes.

The nature of teacher/learner interactions after the IPBPDP showed that the teachers' knowledge, beliefs and attitudes had improved. The teachers were seen to be open to children's contributions to learning in the classroom and designed activities that required learners to actively construct knowledge. However, the teachers missed opportunities to extend children's learning through questioning and answers. In most cases, the teachers' skills and knowledge in interrogating learners' reasoning behind their ideas, questions and suggestions were not explored (see par. 4.4.3.1 for my reflections). Although in Ghana a kindergarten lesson is supposed to last 30 minutes, all the indigenous play-based lessons lasted over an hour, as implementing an indigenous play-based pedagogy requires adequate time for children to engage with their environment, peers and teachers.

7.3.3 Secondary research question 3:

How can changes, if any, in teachers' knowledge and delivery of the curriculum after following the programme be explained?

As shown in 5.5, three interrelated factors can explain teachers' change in knowledge and the delivery of the curriculum after the IPBPDP. The factors are

related to the influence of the programme on the learners, teachers' enhanced competency and teachers' hope for the future success of the programme.

The teachers' change in knowledge of implementing the KG curriculum was a result of their enhanced competency acquired during the IPBPDP. As evident from the pre-programme findings, the teachers' initial teacher training did not equip them adequately to implement a play-based pedagogy. The four-phase IPBPDP systematically introduced the teachers to the teaching of curriculum concepts through different indigenous play activities. Each phase of the IPBPDP was designed to enhance teachers' competence base for implementing the KG curriculum. During the capacity-building workshop, for example, the teachers learned first-hand how to plan and implement an IPBP lesson. The teachers also had the opportunity to try their new knowledge, skills and ideas in a friendly atmosphere and received feedback and support from their colleagues, which further improved their practice.

The capacity-building workshops, which the teachers themselves conducted under a tree, provided an opportunity for the teachers to experience learning outside the four walls of a classroom. The teachers used available materials such as leaves, flowers and twigs from the trees, stones and other materials on the ground during the lesson. This can explain why most of the lessons I observed took place outside the classroom; teachers simply used natural materials from the environment to teach their lessons. The approaches, such as small group and individual group work, hands-on activities and role-play, which were employed in the workshop were evident during the teachers' delivery of the KG curriculum in the classroom situation. These instances reinforce the perspective that teachers teach the way they are trained.

Constant reflection helped the teachers to carefully think about their practice. During the classroom implementation phase, where the teachers practised in the real teaching and learning situation, they documented their planning, presentation and post-implementation thoughts and feelings. This reflective practice made teachers accountable to themselves; they continuously evaluated their decisions and practice with the aim of improving their curriculum delivery and hence learners' learning outcome.

The learners responded favourably towards the teachers' new way of delivering the KG curriculum. As mentioned earlier, the implementation of the IPBP saw learners showing high interest in lessons, and they were actively involved in constructing knowledge. One could say the teachers were ready for the learners instead of the learners being ready for the teachers and for teaching. The teachers admitted that their teaching had changed for the better after the IPBPD, as had the learners' attitudes and behaviour. These changes in the learners explain why the teachers changed in their curriculum delivery and further sparked hope for a change in the entire basic education system in Ghana.

One other way to explain teachers' change in knowledge and subsequent change in curriculum delivery is their hope of achieving a successful kindergarten education. When the teachers were trained and became competent in implementing the KG curriculum through the IPBP, the learners were affected positively, and that convinced the teachers that the IPBPDP was relevant to KG education. Put differently, teachers' enhanced competency (in delivering the KG curriculum) had a positive effect on the learners, and this in turn gave the teachers the assurance of a successful kindergarten education through the IPBPDP. Figure 7.1 is a diagrammatic representation of the interrelated factors that explain teachers' change in knowledge and curriculum delivery.

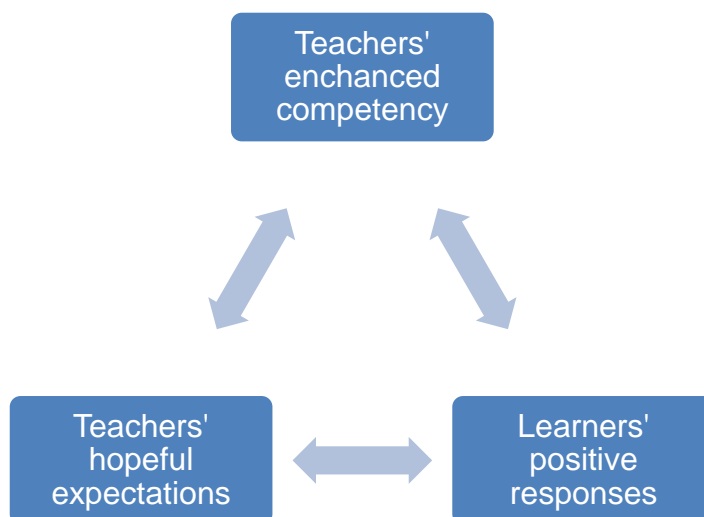


Figure 7.1 The interrelated factors that explain the teachers' change in knowledge and curriculum delivery

7.3.4 Main research question

How can a professional development programme of indigenous play-based pedagogy enhance teachers' knowledge, attitudes and beliefs for improved delivery of the curriculum?

An indigenous play-based professional development programme provides training opportunities for teachers to enhance their knowledge, attitudes and beliefs for improved curriculum delivery. Several capacity-building workshops were organised to address **teachers' training needs**, specifically their knowledge of indigenous play and their attitudes towards using the identified Ghanaian indigenous play, designing and mobilising locally available resources and planning and implementing curriculum contents. During the first two sessions of the workshops, where teachers were exposed to the conceptual play theory for implementing a play-based pedagogy in the classroom, it was assumed that the teachers were able to apply the theories and principles to Ghanaian indigenous play. During the third session the teachers had the opportunity to try out their new knowledge and skills through small-group, hands-on activities and presentations. The activities in the workshops included modelled lessons of what the implementation of an indigenous play-based pedagogy entails in the actual classroom situations (**capacity building**). The classroom implementation phase of the IPBPDP afforded teachers the opportunity to deliver the kindergarten curriculum by employing the IPBP for feedback and further perfection of knowledge, skills and attitudes necessary for implementing the KG curriculum (**implementation and evaluation**).

The IPBPDP provides training opportunities for kindergarten teachers by providing them with guidelines to help them reflect on their delivery of the KG curriculum and hence making them accountable to themselves. Although this study contributes to the understanding of the development of an indigenous play-based professional development programme, it is also subject to a number of limitations.

7.4 LIMITATIONS

As I discussed in chapter 3, I selected a participatory action research (PAR) design for my study whereby I worked with kindergarten teachers to develop and implement an indigenous play-based professional development programme. In order to explore

my research questions, I interacted with the participants in their actual classroom contexts. I generated my data through semi-structured interviews, photovoice, participants' reflective journals and observation field notes.

As consistent with a PAR design, my focus was to harness the experiences and expertise of the teachers throughout all the different phases of developing and implementing the IPBPDP (Bhana, 1999). One limitation of this study is that during the pre-programme phase I employed only semi-structured interviews with the participants to identify their training needs. The data from this interview only presented teachers' views and did not demonstrate teachers' pedagogical practices. Since my first research question sought to gain insight into teachers' knowledge, beliefs, attitudes and how these affected their play-based pedagogical practices, I should have conducted classroom observations to see and better understand teachers' training needs. In this way, I would have been able to corroborate what they said with what they did. For this study to be replicated, I would recommend that the researcher first of all do classroom observation, followed by interviews during which the researcher could ask for further clarification of issues observed. This approach will give the researcher a holistic view of teachers' training needs.

As mentioned in par. 4.4.3, during the implementation phase the teachers (there were two from each school), appeared to receive support from each other in the form of preparing lessons, designing material and mutual feedback after each lesson, which helped them to improve on subsequent lessons. By implication, the teachers experienced the implementation of the IPBP differently, which makes it difficult to generalise kindergarten teachers' implementation of the IPBP.

Another limitation of this study concerns the sample size. As I mentioned in chapter 3, the participants for this study included eight female kindergarten teachers selected from only one municipality in one region in Ghana. Considering that there are gender-specific Ghanaian indigenous games, the findings from this study might be different if I had included male teachers (although I did not exclude male teachers deliberately; there were no male teachers in the schools that participated in the study). This sample is therefore not representative of the population of kindergarten teachers (male and female) in Ghana, and hence findings of this study cannot be generalised to all kindergarten teachers' implementation of IPBP.

7.5 RECOMMENDATIONS

Based on the findings of my research, I make the following recommendations for kindergarten teachers' professional development, policies and further research:

7.5.1 Recommendations for kindergarten teacher in-service trainers

This study recommends that kindergarten teachers should participate in professional development programmes that enable them to plan and implement indigenous play-based pedagogy in the kindergarten settings. The kindergarten teachers' professional development programmes should be based on the guidelines for implementing an indigenous play-based pedagogy programme (see example in 4.4.3.1). The professional development programme should include modules on play-based pedagogy appropriate for kindergarten education, emphasising indigenous play-based pedagogy.

7.5.2 Recommendations for policy makers

The kindergarten 1-2 curriculum for the four- and five-year olds, referred to as the KG curriculum in this study, requires that kindergarten children be taught through play. However, the KG curriculum lacks clarity on the definition of play and activities that could be regarded as such. The KG curriculum does not provide guidelines for implementing a play-based pedagogy either and needs to be reviewed to accommodate the characteristics of a kindergarten curriculum that employs a play-based pedagogy. Additionally, the guidelines for implementing an indigenous play-based pedagogy should be incorporated into the curriculum, as it has the potential to enhance kindergarten teaching and learning. Policy makers need to include researched indigenous play-based pedagogy in the curriculum to ensure that the implementation of the kindergarten curriculum is evidence-based.

Furthermore, policy makers need to take steps to synchronise kindergarten teachers' professional development by adopting the indigenous play-based professional development programme. This will ensure that all teachers working with kindergarten children, whether with a basic education qualification or an early childhood qualification would receive in-depth training in implementing an indigenous play-based pedagogy to deliver the kindergarten curriculum effectively.

7.5.3 Recommendations for kindergarten teachers

An indigenous play-based professional development programme (IPBPDP) needs to be accepted and promoted to kindergarten teachers as an alternative option for training kindergarten teachers in Ghana, since not all the teachers working with kindergarten children received formal training in implementing the KG curriculum. Certificates should be awarded by training institutions and other relevant bodies to teachers who complete the indigenous play-based professional development programme.

7.5.4 Recommendations for further research

This study hopes to inspire further research in the kindergarten teacher professional development field. Specific research to understand which indigenous play will lend itself easily to training the teachers in the implementation of the IPBP is required. A comparative study of the course structure and content of the basic education and early childhood education teacher training programmes is required to see which programme best prepares teachers with the relevant knowledge, skills and attitudes for kindergarten curriculum delivery. Lastly, the integration of technology into the implementation of the IPBP requires additional research.

7.6 CONCLUDING REMARKS

In this study, a professional development programme for kindergarten teachers enabling them to implement an indigenous play-based pedagogy was explored. The first research question (explored in the pre-programme phase) examined teachers' prior knowledge, beliefs, attitudes and practices regarding a play-based pedagogy. In table 7.1, I tried to connect the themes and research question. The themes related to teachers' knowledge, beliefs, attitudes and practices prior to participating in the indigenous play-based professional development programme. Theories linked to how teachers' knowledge, beliefs and attitudes influenced their practice provided the theoretical foundation for the conceptual framework.

Table 7.1: Linking the research question, pre-programme themes and theories

Research question	Themes and sub-themes	Theories
<i>What knowledge, beliefs and attitudes do kindergarten teachers have about play-based pedagogy and how do these affect their practice?</i>	Theme 1: Play-based pedagogy 1. Prior knowledge 2. Attitudes 3. Beliefs 4. Instructional approaches	Play-based pedagogy
	Theme 2: Factors influencing implementation of play-based pedagogy. 1. Initial training 2. Curriculum 3. Pressure	Factors influencing implementation of a play-based pedagogy
	Theme 3: Indigenous play-based pedagogy 1. Childhood memories 2. Importance 3. Needs	Indigenous play-based pedagogy

In Table 7.2, I attempted to link the themes of the post-programme findings with the research questions and the conceptual framework of this study. Theme one focused on the indigenous play-based professional development programme. This theme is linked to the question how the indigenous play-based professional development programme can be used to enhance teachers' knowledge, attitudes and practices. The sub-themes that emerged under this theme included knowledge, attitudes, beliefs and practices. The conceptual framework indicated the indigenous play-based professional development programme as one of its components.

Theme three emerged from exploring the question how change, if any, in teachers' knowledge and delivery of the curriculum after the programme can be explained. The focus of theme three was on the possible factors that could explain the changes identified in the teachers after the implementation of the IPBPDP. This theme is linked to the theories that relate to an effective professional development programme as discussed in Table 2.4. The factors relating to teachers and learners are included in the conceptual framework (see Table 2.4).

Table 7.2: Linking the post-programme themes with the research question and conceptual framework

Research question	Themes and sub-themes	Conceptual framework (2.4)
<p>Research question 2:</p> <p><i>How can the indigenous play-based professional development programme be used to enhance teachers' knowledge, beliefs, attitudes and practices?</i></p>	<p>Theme 1:</p> <p>The indigenous play-based professional development programme</p> <ol style="list-style-type: none"> 1. Knowledge 2. Beliefs 3. Attitudes 4. Approaches 	<p>Conceptual play theory</p> <p>Effective professional development models</p>
<p>Research question 3: <i>How can changes, if any, in teachers' knowledge and delivery of the curriculum after the programme be explained?</i></p>	<p>Theme 3:</p> <p>Possible factors responsible for teacher change in practice</p> <ol style="list-style-type: none"> 1. Learner factors 2. Teachers' personal factors 3. Teachers' hopeful expectations 	<p>Evaluating a professional development programme</p>

7.6.1 My final thoughts: Beyond an IPBPDP

It is an undeniable fact that effective professional development programmes (PDP) play a major role in the quality of kindergarten education globally. Research has shown that through PDPs, teachers are equipped with relevant knowledge, skills and attitudes to implement the kindergarten curriculum. The new knowledge and skills that the teachers acquire through PDPs culminate in improved learning outcomes. The findings of the current study, as discussed above, prove the potential of PDPs to improve the quality of kindergarten education.

By employing both formative and summative evaluations, I found that the IPBPDP not only improved teachers' knowledge, attitudes, beliefs and instructional practices as the delivery of the kindergarten curriculum was concerned; the statements made by the teachers confirmed that the implementation of an indigenous play-based pedagogy in their kindergarten classrooms had also challenged their personal philosophies of kindergarten teaching. The teachers explained that although they were still using the same curriculum with the same four- and five-year-olds, they needed to change in very different ways.

For example, the teachers compared the level of preparation needed to implement an IPBP with the preparation they did when they used the traditional lecture and direct instruction approaches in the kindergarten. They concluded that it was not possible for them to implement an IPBP without proper preparation (as they used to do). One of the teachers (P5), explained that *“as the teacher I must be **well prepared** before coming to the class. In fact, with this kind of pedagogy if you are not well prepared you will bore the children.”* Another teacher (P3) agrees and further adds that *“because without **sitting down and planning** it, you can’t do it ... and you cannot achieve your objective.”* In spite of the demanding pre-lesson preparations which are necessary for successfully implementing an IPBP, the teachers appeared to be coping. According to a third teacher (P8) *“after the programme **I am very, very proud** to have the knowledge. **I am happy** and I wish I had it early on.”*

All over Africa, and in Ghana in particular, kindergarten teachers work in very difficult conditions. They are overwhelmed by large class sizes, low salaries, lack of knowledge of curriculum implementation, lack of parental involvement, pressure from education authorities to produce output of work in the form of formal school work and inadequate to non-availability of teaching and learning materials (Agbenyega & Deku, 2011; Ntumi, 2016; Yorke, 2012). I argue that any form of professional development programme that targets these teachers must have an inherent mechanism that inspires teachers to adopt it, in spite of any challenges its implementation might pose. The IPBPDP appears to have such an implicit mechanism. In Anansi stories and games with which the teachers are familiar, the teachers found common ground on which they engaged with their learners. As discussed under 5.6, the final evaluation of the IPBPDP showed that both the teachers and the head teachers were impressed with the reduction in learner absenteeism in those classes where the IPBP was being practised. This is an achievement that is capable of motivating the teachers to implement and sustain the IPBP for delivering the kindergarten curriculum in Ghana and possibly in other parts of the world.

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