

UNICEF
Teacher TRAINING Packages

Facilitator Guide

NQF Level 7

Play Learning Materials Consortium (PLMC)

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INTRODUCTION

Acronyms

CAPS	Curriculum and Assessment Policy Statement
DBE	Department of Basic Education
DHET	Department of Higher Education and Training
ECD	Early Childhood Development
ELDA	Early Learning and Development Area
HEI	Higher Education Institution
MKO	More Knowledgeable Other
NCF	National Curriculum Framework for Children Birth to Four Years
NELDS	National Early Learning and Development Standards for Children Birth to Four
NQF	National Qualifications Framework
PBA	Play-based Approach to teaching and learning
FP	Foundation Phase
TVET	Technical and Vocational Education and Training
STEM	Science, Technology, Engineering and Mathematics
UNCRC	United Nations Convention on the Rights of the Child
UNICEF	United Nations Children's Fund, (formerly United Nations International Children's Emergency Fund)
ZPD	Zone of Proximal Development

GENERAL BACKGROUND

Background to project

There is widespread and growing international recognition of the importance of play for promoting effective development and learning in the early childhood years. This has been stimulated by research on brain development and the realisation that the demands of the 21st century require flexible and creative learners. The right to play is recognised in the Convention of the Rights of the Child, and the South African Department of Basic Education (DBE) is strongly promoting the adoption of a play-based approach for children from birth through the Foundation Phase.

To strengthen play in existing early childhood education programmes UNICEF, DBE and DHET commissioned the development of NQF aligned packages of teacher learning materials on play-based learning and assessment tools to complement existing training programmes for early childhood education and the Foundation Phase (Grades R to 3).

Development was informed by a rapid review of existing teacher education on play-based learning including pre-service/initial teacher education and in-service/continuing teacher professional development at higher education institutions and in technical and vocational education and training colleges, and non-profit and private resource and training organisations. This identified what already existed, and gaps that needed filling. The importance of a dedicated training focus on play pedagogy in changing teaching practice has been demonstrated (Vu, Han and Buell, 2015).

Key findings of the rapid review considered in the development of the teacher training packages were that:

- ◆ the use of a play-based approach was more often implicit and “threaded through” the course material rather than specifically referred to, leaving it to teacher trainers to focus on play or not
- ◆ there was no common understanding of the continuum of play-based learning
- ◆ for HEI courses most of the references to play referred to Grade R only. Except for Play-SA, materials are primarily aimed at practitioners working with younger children.
- ◆ TVET courses are very prescriptive with high time demands and little if any discretionary time, which means that play will be excluded unless explicitly mentioned in the course materials.

In course outlines where play is mentioned, there is more emphasis on theories and descriptions, and less focus on **how** to implement a play-based pedagogy/how to facilitate learning through play. In the materials reviewed there is more focus on activities.

How to use this guide

Taking account of the limited training time available for existing learning programmes this guide is not intended as a stand-alone module on play. Its suggested use is that three to four sessions, focused on core knowledge of what play is and why and how we use a play-based approach, are included in existing ECD learning programmes. The remaining content can be used as appropriate and adapted to the specific training/teaching context. For example, some of the 'how to' section could be integrated into the existing pedagogy sections of different learning programmes. A variety of experiential activities are provided for each topic and a selection can be made depending on the needs of your students and available course time.

The teaching package for each NQF level includes:

- ◆ An up-to-date literature review for background reading
- ◆ An annotated bibliography at different NQF levels for additional reading for students and facilitators
- ◆ A facilitator guide with activities in shaded boxes
- ◆ An accompanying student guide with essential content and materials for activities. These guides are made up of separate sets of student handouts linked to each topic and are not designed as a full manual. We recommend that facilitators reproduce only the relevant sheets for the sessions they plan to present

Time allocation for activities

Timing required for different activities is given in Table 1.

Table 1: Time allocation for activities

Section of manual	Activity number	Activity Name	Time allotted
Approach			
Adult learning	1.1	The nature of play	30 minutes
What is play?	4.1	The essence of play	45 minutes
	4.2	Executive functioning skills	45minutes
	4.3	Play in an early learning setting	25 minutes
	4.4	Language play	30 minutes
	4.5	Play and culture	20 minutes

Principles of play	5.1	Play is fun	40 minutes
	5.2	Play is intentional	30 minutes
	5.3	Play can be differentiated	30 minutes
	5.4	Play is meaningful	30 minutes
	5.5	Play is communicative	20 minutes
	5.6	Play allows choice	30 minutes
	5.7	Principles of play	80 minutes
Play continuum	6.1	Forms of play	40 minutes
	6.2	Moving up and down the play continuum	40 minutes
	6.3	Defining agency	40 minutes
	6.4	Agency in children's play	25 minutes
	6.5	Play activities and agency	30 minutes
How to implement a PBA			
Plan	7.1	Responsiveness	15 minutes
	7.2	Teacher needs versus child needs - Debate	30 minutes
	7.3	Planning a play-based activity	60 minutes
Set up	7.4	How teachers see children	25 minutes
	7.5	Transforming a Foundation Phase classroom	30 minutes
	7.6	Creating a welcoming PBA environment	30 minutes
	7.7	Designing a dream play space	90 minutes
Teach	7.8	Noughts and Crosses/Tic-Tac-Toe	10 minutes
Assess	7.9	Using questions in scaffolding children's play	30 minutes
	7.10	Using language as a scaffolding technique	45 minutes
	7.11	What is the place of courage, curiosity, creativity and relationships in a PBA?	20 minutes
	7.12	Practising scaffolding	30 minutes
Assess	7.13	Gathering information in a PBA	20 minutes
	7.14	Observation in practice	40 minutes
	7.15	Observation as assessment?	30 minutes
	7.16	Planning a guided play activity	45 minutes
Reflect	7.17	Revisiting the PBA cycle	60 minutes
	7.18	Reflection on adult learning	45 minutes
	7.19	Reflection Game	25 minutes

List of tables

Table 1: Time allocation for activities

List of figures

Figure 1: Zone of proximal development

Figure 2: Types of play

Figure 3: Stages of social play

Figure 4: The play continuum

Figure 5: Play-based approach to teaching and learning cycle

Figure 6: An intentional teacher's planning agenda

Figure 7: Play-based approach to teaching and learning cycle – Set up

Figure 8: Play-based approach to teaching and learning cycle – Teach

Figure 9: Play-based approach to teaching and learning Cycle – Assess

Figure 10: Play-based approach to teaching and learning Cycle – Reflect

Terminology

In this guide we use the following terms:

Caregivers which includes parents, guardians and all other persons directly involved in caring for the children

Curriculum refers to both national curricula in current use i.e. the 0-4 years National Curriculum Framework (NCF) and the Curriculum and Assessment Policy Statement (CAPS) Grade R - 3 curriculum

Early learning settings refers to classrooms, ECD centres, playgroups, crèches, toy libraries, and any setting in which an early learning programme is delivered

Mirroring means that this guide uses similar play-based principles for adult learning activities to those used to support play-based learning and teaching with children

Site refers to the place where the early learning programme is delivered

Teachers refers to staff working directly with children including ECD practitioners, and Foundation Phase educators.

1. HOW ADULTS LEARN

Human beings have an innate and powerful capacity for learning which occurs across the lifespan. It begins very early in babyhood, through a natural curiosity and drive to learn. Young infants have even been referred to as “scientists in the crib” (Gopnik, Meltzoff, & Kuhl, 1999). This capacity to learn follows us all the way into adulthood, although it takes different forms, but it remains a basic human activity, and something that we are all capable of throughout our lives.

At each stage in our growth and development we are learning, even though this learning occurs in different ways and makes different demands of us. Learning always occurs within a context, and this context either facilitates learning, or presents obstacles to it. This is as true for adults as it is for children.

We learn in different ways and through different means. Research is showing us that one of the most powerful facilitators of learning is play, and that playful activities need to be present in children’s learning environments if learning is to be as optimal as possible for the child’s overall development. Playful experiences help children engage in what can be called deep learning. Play supports a complex emerging understanding of ideas in children, that allows them to connect concepts and skills, apply their knowledge to different situations, and spark new ideas (Winthrop & McGivney, 2016).

Researchers argue that the same applies to adults. That if we want to extend our understanding of something, come to terms with it, explore it constructively, think it through, push back the frontiers of possible change and innovation, reinvent, adapt and so on, then one of the best ways to do this is through play. In the world of adult business, for example, Michael Schrage (2000) in discussing his notion of ‘serious play’ in the context of business suggests a mindset change towards more experimentation and iteration, where the ability of adults to ‘play’ with alternative futures becomes a tool for change. Playing with ideas, choices, possibilities, options, alternatives becomes a perspective and a practice that makes innovation, and deep reflection and learning possible.

There are some important principles that make up the kind of play which supports children’s learning. These principles are aspects or properties of the kinds of play that help children to grow and develop. By looking carefully at the principles of play in any given activity, we can decide whether the kind of opportunities for play inherent in this activity are likely to support their learning or not and can thus be a guide. The principles that are broadly agreed on amongst play theorists are briefly outlined here and elaborated on in Section 4.

Research agrees that the most important principles of play are:

- ◆ **Intentional.** Play has a purpose, and has a goal
- ◆ **Differentiated.** Play gives different children with different ways of thinking and learning an opportunity to participate
- ◆ **Active.** Play requires that children take part, that they engage, that they do not simply sit and watch
- ◆ **Fun.** Play has joy in it, it makes children happy, they enjoy themselves playing
- ◆ **Choice.** Play is done by choice, not by force, the children themselves decide to do it.
- ◆ **Agency.** The children playing are deeply involved in it and are thinking while they play.

In addition, play is **iterative**, it provides opportunities to try something out in many ways and many times, giving children the chance to form ideas, revise these ideas and to see where these ideas may lead them in future activities.

Importantly, play is also **socially interactive** in its nature. Social interaction with others through play, even in play between two small children, provides a powerful context for learning. The process of listening to what other children say, watching what they do and how they do it, sharing what they think and how they play gives children multiple learning opportunities.

Activity 1.1: The nature of play (30 minutes)

Let's Play!

Purpose: To explore the nature of play

Materials: 40 matchsticks per group

Facilitation

Divide the students into pairs or trios. Each group is given 40 matchsticks.

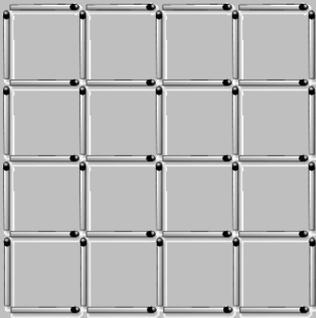
They are to arrange them in a 4 by 4 square grid (see below).

Instructions

Using the matchsticks that you have been given, change this arrangement by removing 9 matches so that no square of any size remains.

The first group to find the solution is the winner.

An extension of this game, or an alternative is to give the groups a time limit (6 to 10 minutes) and see how many groups can solve the puzzle within that time.



Reflection

Students discuss as a group:

Which of the principles of play outlined above were present in this game?

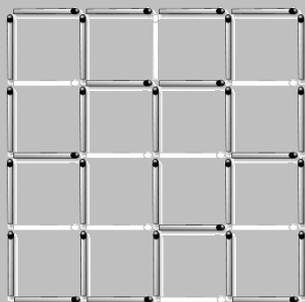
Can we therefore think of an adult game such as this one as play?

Did playing this game challenge you?

To play this game, you had to think in certain ways. What kind of thinking did you have to do to complete the task? Is this thinking useful in other contexts?

Notes to the facilitator

Below is the solution to the game.



We want to frame this teaching material as much as possible within playful adult learning, using the principles outlined above so as to 'tap into our (human adult) ability to experience curiosity, competence and reciprocity' and to 'make it possible for us to exercise autonomy, mastery and a sense of purpose' (The Lego Foundation, 2013).

We will discuss how to create a playful environment in a school or ECD centre that will harness these principles of children's playful learning and enable the teacher to help provide children in these educational environments, opportunities for play that will support their learning as much as possible.

The intention in this material is to build playfulness into it throughout, both in the way it is structured and taught, as well as in terms of the content, in order to support students' learning. We hope to optimise the way students engage with the material by **mirroring** the playful approach through which children learn best.

This playfulness can then be transferred into what the students do in their schools/ early learning settings in terms of designing and implementing playfulness activities for their children.

Notes to the facilitator

It is highly recommended that students create an individual writing portfolio.

This comprises of all written work that they do throughout this course, or through chosen sections.

"The relationship between the amount of writing for a course and students' level of engagement - whether engagement is measured by time spent on the course, or the intellectual challenge it presents, or students' level of interest in it – is stronger than the relationship between students' engagement and any other course characteristic ..."

Light (2001) '**Making the Most of College: Students Speak Their Minds**' Cambridge Harvard University Press, 2001, p55.

We believe that this writing portfolio combined with the experience of playing the games presented in this material will promote a deeper engagement with, and understanding of, the material than would otherwise occur in students.

2. LITERATURE REVIEW: SUMMARY

Below is a summary of the important sections of a current literature review on play and play-based pedagogy for background information. For the full literature review and detailed references, see Appendix 1.

History of play in Early Childhood Education and Development

The importance of play for early childhood development was recognised by the pioneers of early childhood education as well as by leading child development theorists. Jean Piaget explained how children actively construct knowledge by interacting with the environment, peers and resources. Lev Vygotsky's sociocultural theory maintains that children develop thinking by interacting with more experienced others - older children, peers and adults who scaffold their learning. Play is essential for developing language, self-regulation and symbolic thinking.

Until quite recently there was a strong focus on learning through free play only, but research has now shown that certain skills are best developed through experiences in which teachers build on children's interests and guide their play towards learning outcomes.

Play and policy

The value of play for child development and learning has been recognised in the international commitment to the right to play in the Convention on the Rights of the Child. It is also emphasised in the South African National Integrated Early Childhood Development Policy and the National Curriculum Framework for Children birth to four years. However, in practitioner and teacher qualifications play receives more emphasis for the younger years and Grade R, than for children in Grades 1 to 3. To promote play-based learning across the early years the Department of Basic Education has developed PlaySA - an online course for teachers working with children from 0 – 9 years.

What is play?

Play is usually referred to in terms of generally agreed characteristics: that it is joyful, motivating, actively engaging, social and valued as a process rather than an outcome. Neuroscience studies show how brain processes activated by these characteristics of playful experiences help children to learn and develop.

Developmental psychologists commonly divide play into five types: physical play, play with objects, symbolic play, pretend play and games with rules. Each of these takes different forms as the child develops becoming more complex as children get older. Many studies show that children perform at significantly higher levels in playful rather than non-playful situations. Play is associated with language and maths development, social competence and developing of reasoning as well as with helping children adapt to formal schooling.

Play in different cultural settings

Play is influenced by the social and cultural context in which it takes place. Most play studies and play-based teaching and learning approaches have been done and developed in Western cultures and we cannot assume that all children engage with play in similar ways. While play is often referred to as children's work in English speaking and European heritage cultures, in cultures where helping with family work is very important, play tends to imitate work activities or children bring a playful element to their chores. Who children play with is also culturally determined. In traditional societies in Africa for example, children are expected to play with other children and to receive any guidance they need from older and/or more expert playmates.

How particular cultures think about play affects the implementation of a play-based pedagogy. In societies where children are expected to play with children, adults may find playing with a young child for learning purposes to be a strange idea, or if teachers are expected to be strict as in Chinese culture, allowing play may be negligence. Where academic content is prioritised, play is often not promoted.

Play-based pedagogy – a play continuum

Based on what we now know about the importance of interactions between children and teachers to support learning, and recognition of cultural variations in play there have been attempts to understand how to apply this to a play-based approach. Previously we tended to think of free play and teacher structured activities as entirely different, but it is more useful to view play as existing on a continuum. At one extreme is open-ended, free or child-led play in which children take the initiative as to what and how to play with materials and opportunities set up by the teacher. In the middle is guided play in which adults scaffold child-led play and at the other extreme more structured games where adults design, set rules and scaffold the play with a learning objective. It is now widely accepted that the combined use of the different types of play and matching the type of play to the learning objective, provides for the best teaching and learning.

Implementing a play-based pedagogy

Research on play-based learning for early childhood education in general and especially in the early grades of schooling has identified several common pitfalls as well as guidelines for effective practice. When staff are not adequately trained, or there is pressure to cover a prescribed curriculum, it is difficult to implement an effective play-based programme. It is also important to have a range of materials that are open and flexible, and which allow children to engage with peers and adults. In the early school grades in many countries, including in South Africa, teachers tend to resort to more formal academic methods especially when there is limited physical space, few materials and a rigid daily schedule. Parents may also resist the idea that children are learning through play. Implementing a play-based approach has implications for how formative assessments should be conducted and this too is often challenging for teachers.

Conclusion

The world-wide focus on play pedagogy is relatively new and there is still much to be studied and learned in order to effectively integrate it into education for children from birth to nine years, across the range of cultural and social contexts. Further research is necessary to understand when and how different types of play are most effective, and how to introduce this to both teachers and parents.

3. ANNOTATED BIBLIOGRAPHIES

See Appendix 2 for a selection of references to relevant additional readings for background and preparation. The bibliography is organised by NQF level so that facilitators can use them as recommended reading.

4. WHAT IS PLAY?

Learning outcomes

Students will:

- ◆ come to an understanding of the essence of play, working towards a definition
- ◆ examine the research regarding the importance of play and its impact on the developing child
- ◆ reflect on what these mean for teachers wanting to support play-based learning
- ◆ describe different types and stages of play that support children's development and learning
- ◆ investigate different theoretical approaches to play
- ◆ critically review cultural perspectives on play.

As fundamental as it is to learn across the lifespan, research provides ever mounting evidence that play is of vital importance to the developing child.

This is also now recognised in policy related to children's play, where for example, it is now stated as a right in South Africa.

Children have the right to play

The right to play is underpinned by the widely acknowledged view that “the hands-on, child-driven educational methods sometimes referred to as “playful learning” are the most positive means yet known to help young children's development.” (Zosh *et al.*; 2018).

The United Nations Convention on the Rights of the Child (UNCRC), which underpins South African Government policies for children, provides that:

State Parties recognise the right of the child to rest and leisure, to engage in play and recreational activities appropriate to the age of the child and to participate freely in cultural life and the arts. (United Nations, 1989, Article 31).

Curriculum policies and guidelines

- ◆ In curriculum and teacher training policy and guidelines, play is strongly promoted in the National Curriculum Framework for children from Birth to Four (Department of Basic Education, 2015).
- ◆ The Policy on the Minimum Requirements for Teacher Education Qualifications (Department of Higher Education and Training, 2015) explains that, “Grade R prepares young children for formal learning. The focus of this grade is on **learning through play**, developing physical coordination as well as developing spoken language competence and fundamental ideas that will form a basis for the future development of number sense and literacy” (pp 25 – 26).

Implementing this policy is a major challenge to the South African government as it is to countries across the world.

If it is to be put into practice as a right, then a good place to start is to define play.

However, it is not easy to pin down play in a definition. As Zosh *et al.* (2018) state, "Defining play has plagued researchers and philosophers for years. From describing play as an inaccessible concept due to its complexity, to providing checklists of principles, the field has struggled with how to conceptualize and operationalize "play."

Various theorists have approached the topic from different perspectives, but generally it is agreed that play is a vital part of human (and animal) development.

Activity 4.1: The essence of play (45 minutes)

Purpose: To explore what play is by looking at a range of definitions from the research literature.

Materials: Video clip (<https://aeon.co/videos/children-at-play-provide-a-rare-glimpse-into-the-imagination-ours-and-theirs>), pen and paper

Facilitation

Part One

Ask the students to watch the following video of children playing in an outdoor setting in Scotland.

They are to make rough notes on what they see and hear during the children's activities.

Students watch the video again bearing in mind the notes they made during the first viewing.

This time students write their own short working definition of play on a piece of paper based on what they have seen and heard in the video.

When everyone is ready, each person passes their definition to the person on their right. Each student reads their neighbour's definition and adds to or makes a change or comment on it. Repeat this one more time. Then the pieces of paper are returned to the original writer. Two additions or changes or sets of comment will have been made.

Part Two

The original writer reviews what changes or additions have been made.

Students read the following definitions of play:

- ◆ Vygotskian theory states that play facilitates cognitive development. Children not only practice what they already know - they also learn new things. In discussing Vygotsky's theory, Vandenberg (1986) remarks that "play not so much reflects thought (as Piaget suggests) as it creates thought" (p. 21).
- ◆ Piaget (1952) defined play as assimilation, or the child's efforts to make environmental stimuli match his or her own concepts. Piagetian theory holds that play, in and of itself, does not necessarily result in the formation of new cognitive structures. Piaget claimed that play was just for pleasure, and while it allowed children to practice things they had previously learned, it did not necessarily result in the learning of new things.

- ◆ Stuart Brown (2010) cited by Zosh *et al* (2018) argues that play is evolutionary and has “the following properties: apparently purposeless/done for its own sake, voluntary, inherent attraction, freedom from time, diminished consciousness of self, improvisational potential, and continuation desire.”
- ◆ David Elkind (2009), child psychologist and educator says, “play can be defined as “the modification of experience as the result of behaviour.”
- ◆ The Convention on the Rights of the Child defined play in general comment No 17 (United Nations, 2013, Paragraph 14c) as “any behaviour, activity or process initiated, controlled and structured by children themselves; it takes place whenever and wherever opportunities arise. Caregivers may contribute to the creation of environments in which play takes place, but play itself is non-compulsory, driven by intrinsic motivation and undertaken for its own sake rather than to an end”.
- ◆ “Play is the work of the child” Maria Montessori.

Reflection

Students now read their own definition of play, with the additions, changes or comments made by their neighbours. Students discuss and explain whether they agree with the additions, changes or comments, and why, or why not?

They reflect on which definition above they feel is closest to their own.

Students revise their own definition, and this becomes part of their writing portfolio.

We look now at two theorists who have had a major impact on how we see play.

The constructivist view on play

Constructivists believe that children are actively involved in their own learning and that they construct knowledge for themselves as they explore and interact with the social and physical environment. Constructivists recognise the central importance of play in young children’s development.

A brief overview of two constructivist theories can help us understand the importance of play.

1. **Jean Piaget (1896–1980)** was a Swiss psychologist who strongly influenced our understanding of children’s development, including the role of play.

There are three major ideas proposed by Piaget that are fundamental to his view on play, and which have had a profound impact on the way we see children’s play.

- a. Children construct their own knowledge in response to their experiences.

Piaget identified three types of knowledge that children acquire:

- ❖ **Physical knowledge** has to do with objects in the world that children find out about mainly through active exploration with their five senses.
- ❖ **Social knowledge** is about the social world and can only be learned from other people – their culture, traditions and language.
- ❖ **Logico-mathematical knowledge** refers to how the brain organises and puts together pieces of knowledge to form new knowledge.

- b. Piaget proposed that cognitive development occurs through the two processes of **assimilation** and **accommodation**. Cognitive growth is the result of the constant interplay between the two, but they both occur within the context of a schema.

A **schema** is "a cohesive, repeatable action sequence possessing component actions that are tightly interconnected and governed by a core meaning" (1962, p. 7). It is the basic 'building block' which the child uses to organise knowledge and create meaning about something(s) in the world. These schemas change under the influence of the processes of assimilation and accommodation.

Assimilation is the collecting and classifying of **new** information. When new information is encountered, this is added to the existing schema; in other words, it is assimilated. However, it will only be assimilated if it does not conflict with what the child has already established as a schema, or what the child already knows. Children try to match the new experiences/information with an existing schema.

Sometimes there is cognitive conflict when the existing schema cannot assimilate incoming information, the new information cannot be fitted into the schema. Then the child's existing schema is modified or changed to include the new information and this is called **accommodation**. In this way the child's understanding develops, and learning occurs. The environment plays an important role here.

- c. What results from assimilation and accommodation is what Piaget conceived of as a process of achieving **equilibrium**, or balance, in the child's state of 'knowing'. This balance is upset when new conflicting information is encountered, resulting in disequilibrium. The child has to work through the processes of assimilation and accommodation in order to achieve a new state of equilibrium, a new schema, and learning occurs. This is a continual process, and it is easy to see how play can contribute to this learning.

2. **Lev Vygotsky (1896 – 1934)** was a Russian psychologist who developed a socio-cultural theory. His theory focused on the way children construct their knowledge through social interactions within the context of their culture, family and other people.

Play is central to Vygotsky's theory. His view differed from Piaget because he believed that play does teach children new things as well as provide an opportunity for them to practice what they know. Vygotsky maintained that play is a social and cultural activity and he noted (1978, p. 102) that play "contains all developmental tendencies in a condensed form and is itself a major source of development." In Vygotsky's view (1978) when play is initiated by children, they are in control of their own learning. He suggests that when children play, they set their own level of learning and it is therefore always developmentally appropriate.

Vygotsky (1978, p. 102) believed that pretend play was a leading factor in development and that during pretend play:

- ❖ children act out events and ideas that they come across in their daily lives, and in so doing they develop an understanding of their world, and the people around them.
- ❖ children use symbols that stand for real things. This helps them to understand that objects and ideas can be represented in different ways such as through art, language, mathematical symbols, music, song, dance and drama.

Vygotsky is perhaps best known for introducing two important ideas which inform both children's play, and the adult role in relation to play.

The first is the **Zone of Proximal Development (ZPD)**. In Vygotsky's theory (Vygotsky, 1978, p. 86) there is a difference between what children can learn on their own and what they can do with support. The ZPD is the area between what the child can do without help and what is too difficult for the child to accomplish on his/her own.

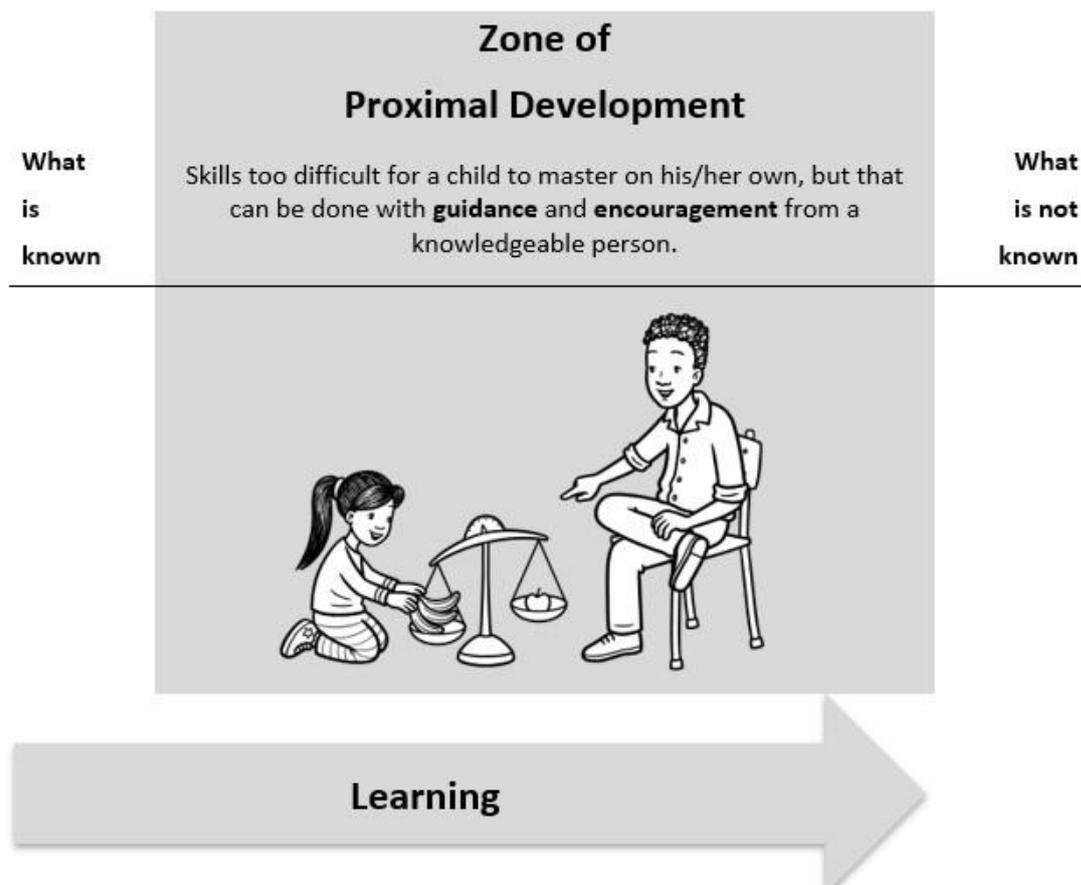


Figure 1: Zone of Proximal Development

He also believed that higher order mental processes can only be learned through the guidance of what he called **More Knowledgeable Others (MKOs)**, e.g. teachers, parents, caregivers, and/or capable peers. This is Vygotsky's second central idea. It is within the ZPD area of a given child that an MKO plays a role. We will explore this in more detail when we consider the continuum of play.

From a different perspective entirely, an **emotional social perspective**, psychodynamic theorists such as Freud, Erikson and Bowlby saw play as important for young children in providing a safe release of negative emotions and stresses. Erikson (1950) states that 'solitary play remains an indispensable harbour for the overhauling shattered emotions after periods of rough going in the social seas.' (Erikson 1950: 194).

Why is play important?

Play the students the following video:

<https://raisingchildren.net.au/toddlers/videos/play-helps-development>

We now know and are finding more and more research to corroborate the idea that play supports all aspects of children's holistic development including physical, cognitive, language, emotional and social development.

Good examples of this come from research on play itself in its varied forms and contexts, and the brain and executive function.

The early years are very important for brain development and learning. In humans, the prefrontal cortex of the brain is responsible for executive function skills. These are a set of thinking processes which work together to help in organising thinking and managing behaviour. These skills begin developing early in a child's life and continue through the early childhood and school years.

There are three main areas of executive function skills, which work together in a complex set of relationships (Diamond, 2013):

1. **Working memory.** This is the ability to hold information in the memory and be able to use it when needed.
2. **Inhibitory control.** We know this as self-control, which is the ability to stay focused and resist the impulse to be distracted by what is happening around us. It allows efficient task completion and behavioural control.
3. **Cognitive flexibility.** This is the ability to shift attention and take a different cognitive perspective. It facilitates the development of creativity, adaption of thinking, and facilitates changes in ways of thinking in order to problem solve.

Activity 4.2: Executive functioning (45 minutes)

Don't finish that word!

Purpose: This game combines several different cognitive skills, the most crucial one being working memory.

Facilitation

- ◆ Students play in groups of between 2 and 4 people.
- ◆ In this game, players attempt to spell out words without completing/finishing the whole word. The starting player thinks of any word but does not tell the other player(s) what it is. S/he says the first letter of this word aloud. Taking turns, the other players add letters to this first letter, and try not to make a word.
- ◆ For example, the first player says the letter "C." The second player says "A." The third player does not want to add an N or a T for example, because those two letters would complete words – 'can' and 'cat'. But if the third player adds an "M," the word is not completed, there is no such word as 'cam' and the game can continue.
- ◆ A player can challenge the previous player if they think there is no word beginning with 'ca' for example. If that player can identify a word that begins with 'ca', then

the player who challenges gets a point. If there is a challenge and there is, in fact, no word starting with 'ca', then the player who cannot identify a word with 'ca' gets a point.

- ◆ The idea is NOT to collect points. After three rounds of the game, the player with the LEAST points wins.

Reflection

As a whole group, students discuss how working memory is involved in this game, describing what would happen to a player of this game who did not have a good working memory.

In small groups students reflect on how working memory could affect Grade R to Grade 3 children's performance in a teaching and learning environment. Think of three strategies to help children to practise working memory.

Each group reports back and students make a note of the strategies as they are reported.

(This note could go into their writing portfolio).

Children need many opportunities to practice their emerging executive function skills, and if we glance back at the principles of play mentioned in Section 4, it should be clear that learning through play would provide a fundamental foundation for this kind of cognitive development.

Notes to the facilitator

The following resource identifies some age-appropriate play activities to strengthen these three areas of executive function.

Reading: Centre on the Developing Child at Harvard University (2014). **Enhancing and practicing executive function skills with children from infancy to adolescence.** Retrieved from www.developingchild.harvard.edu

This would form part of the students' writing portfolio:

'Try one of the play activities discussed in this reading with a young child of your choice. Make notes on the child's response (1 page).'

As we have alluded to, play has an important role in a child's emotional growth, and research has pointed to three areas where play helps children develop emotionally: building self-confidence and esteem; experimenting with various emotions; and releasing emotions from trauma.

The playground is a complex social network where children can learn valuable everyday life lessons about interacting with others, social norms and independence and other relationship-building skills.

Activity 4.3: Play in an early learning setting (25 minutes)

Purpose: To get students to think about practical ideas that can be used in specific ECD contexts.

Materials: Video clip

<https://developingchild.harvard.edu/resources/play-in-early-childhood-the-role-of-play-in-any-setting/>

Facilitation

Students watch the video.

Reflection

In small groups, they discuss whether there were any ideas in the video that they think they might be able to create/implement in an ECD setting/school where they live. They should identify for each chosen activity:

- ◆ why they particularly chose that/those activities in relation to the children who live in that community, and
- ◆ what the chosen activities might offer the children in their contexts in terms of the social and emotional aspects of play.

Five types of play

The current research literature on play identifies an agreed five broad types of play based upon the developmental purpose which each serve. This research has its origins in the work of Jean Piaget, who was among the first psychological theorists to carefully detail distinct types of play as they emerged at different stages during early childhood.

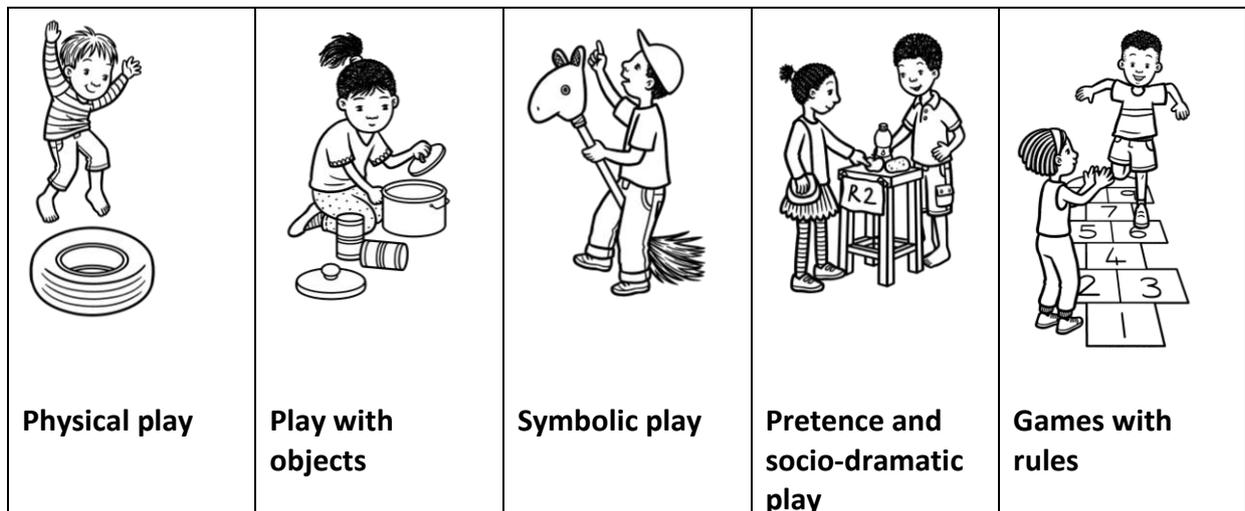


Figure 2: Types of play

These five types of play are thought to support all developmental domains – physical, social, emotional and cognitive. They are presented below with a brief definition as provided by Whitebread *et al.* (2017):

Physical play

“In human children it includes activity play (e.g. jumping, climbing, dancing, skipping, bike riding and ball play), fine-motor practice (e.g. sewing, colouring, cutting, junk modelling and manipulating action toys and construction toys) and what is usually referred to as ‘rough-and-tumble’ (play fighting with friends, siblings or caregivers).” P 6

Play with objects

“Concerns children’s developing explorations of the world and the objects they find within it. It also has interesting and important links to physical play – particularly in fine motor development and pretence when it involves building models of real or imaginary objects and creatures and imagining a scenario or narrative.” P 10

Symbolic play

“Concerns play with the various symbolic representational systems we use to make and communicate meaning. For this reason, an alternative name for this type of play might be ‘semiotic’ play. “ p 14

Pretence and socio-dramatic play

Children engaging in this kind of play set up imaginary situations using symbolic representations (i.e. using objects, actions or ideas to represent other objects, actions or ideas), often in groups. They pretend to take on a role of someone else, imitating actions and speech from earlier observed situations.

Games with rules

“These include physical games such as chasing games, hide-and-see, throwing and catching etc. As children mature, electronic and computer games, and the whole variety of sporting activities emerge.” P 24

It is helpful to look at these five types of play to understand how play develops in young children. These types of play can be found across all cultural groups to a greater or lesser extent. How much the different types of play are emphasised and supported varies between cultures and is based on different values and beliefs regarding childhood and play, which in turn relate to different social and economic contexts (Whitebread, 2012).

Notes to the facilitator

The following readings provide more detailed information.

Reading 1: New Foundland, Labrador Education and Early Childhood Development (2016) Full-Day Kindergarten Play-Based Learning: Promoting a Common Understanding. Canada. Pages 14 – 16

Reading 2: Whitebread, D., Neale, D., Jensen, H., Liu, C., Solis, S.L., Hopkins, E., Hirsh-Pasek, K. Zosh, J. M. (2017). The role of play in children’s development: a review of the evidence (research summary). Denmark: The LEGO Foundation.

Work with these readings could form part of the students' writing portfolio:

Students identify two pieces of research mentioned in these readings on types of play that they found most interesting. They make notes on why they found them particularly stimulating.

Students consider how they might use this information about types of play in their own early learning setting/classroom depending on the age of the children they teach.

Activity 4.4: Language play (30 minutes)

Purpose: To explore the use of play with words as a form of language play

Facilitation

"Language play, a common children's activity, includes diverse behaviours such as joke telling, using metaphors, and repeating sounds as in chants, rhymes, and nonsense verse." (Varga, 2000, p. 142).

Language play is an important form of symbolic play, since language lies at the heart of many human endeavours, particularly academic ones.

Language play also persists into adulthood in the form of joke telling, poetry creation, advertising and so on, and speaks to creativity, innovation and pleasure.

Students work in groups of 2 or 3 people to look at the quote from Varga, and share a joke, a rhyme, a chant that they know and grew up with.

Students use the following list of words to make up a nonsense story which one member of the group reads to the whole group. The story must use at least 5 of these words and to be no longer than 3 sentences.

- ◆ Cream
- ◆ Dream
- ◆ Steam
- ◆ Stream
- ◆ Team

Reflection

In their groups students share some personal responses to playing with words in this way.

Students write a short paragraph describing how they feel this kind of language play benefits the child in a Grade R class, for whom literacy is beginning to emerge.

This could go into the student's writing portfolio.

Stages of social play

Mildred Parten (1932) researched the social development of young children and noted that, with age, children’s play becomes increasingly more complex. She defined four stages of social play that are still used today, and described in New Foundland, Labrador Education and Early Childhood Development (2016):

Solitary play

“During solitary play, children play alone and independently with objects. Other children playing nearby go unnoticed.” p. 20

Parallel play

“In parallel play, children play side by side but still are engaged with their own play objects. Little interpersonal interaction occurs, but each may be aware of and pleased by the company of a nearby companion engaged in a similar activity.” P. 20

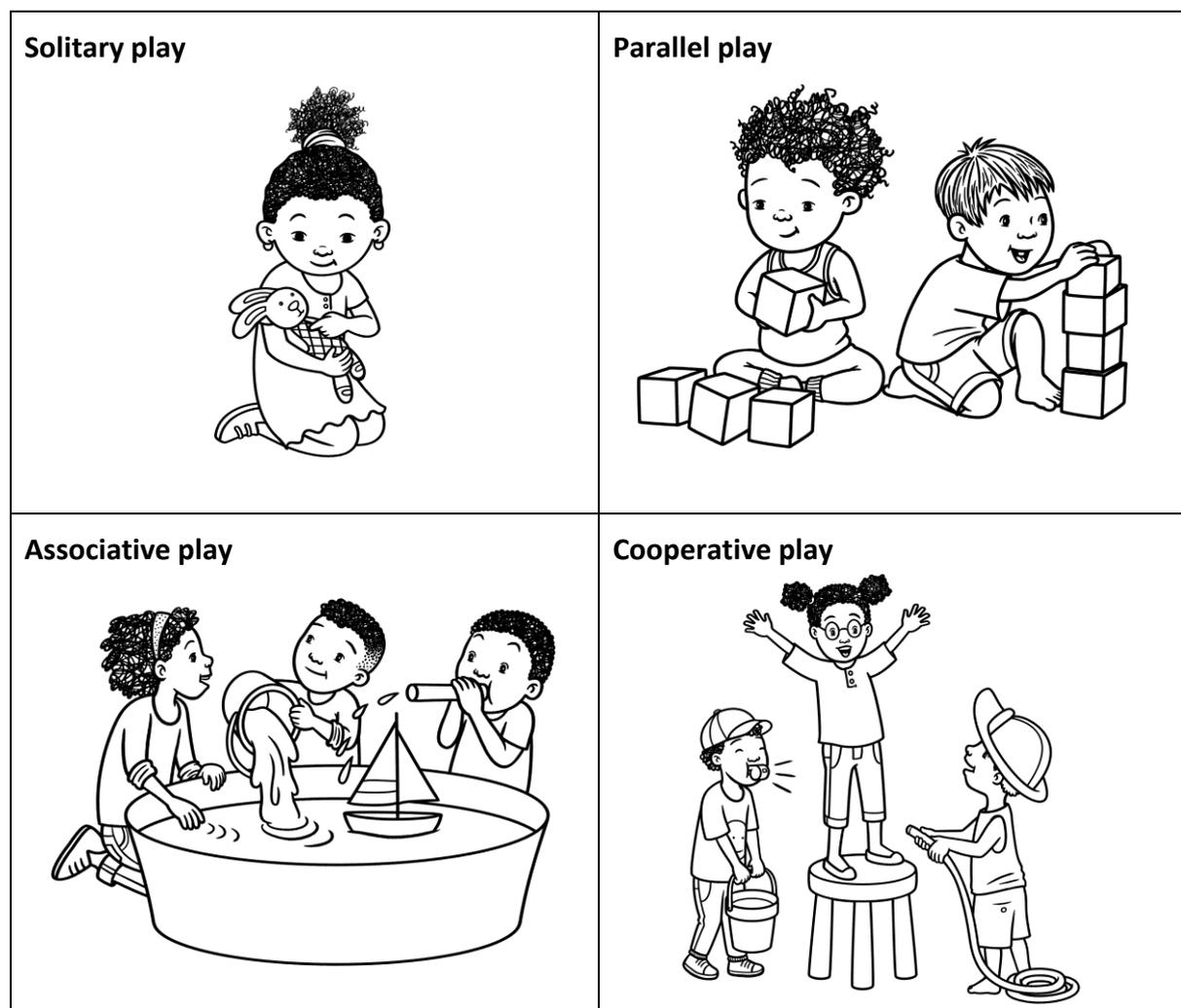


Figure 3: Stages of social play

Associative play

“Associative play involves pairs and groups of children playing in the same area and sharing materials. Children tend to interact briefly. While some cooperation and negotiation may be observed, true cooperation and negotiation between children is rare.” P. 21

Cooperative play

“Cooperative play is the most social form of group play. In it, children work together to create sustained play episodes with joint themes. They plan, negotiate, and share responsibility and leadership.” p. 21

Cooperative-competitive play

This is “a type of social play for older children, beginning at about age 7 or 8, that ... involves activities that are formally patterned toward team victory such as organized sports.” P. 22

Children move in and out of these stages of social play throughout their childhood.

Notes to the facilitator

The following reading provides more detailed information.

New Foundland, Labrador Education and Early Childhood Development (2016) **Full-Day Kindergarten Play-Based Learning: Promoting a Common Understanding**. Canada.

Work with this reading could form part of the students’ writing portfolio:

In the section ‘Learning happens here’ under each type of social play, briefly describe an example of this type of play for the age of child that you teach/ will be teaching?

Read more about types of play in the following resource:

Reading: Whitebread, D., Neale, D., Jensen, H., Liu, C., Solis, S. L., Hopkins, E., Hirsh-Pasek, K. Zosh, J. M. (2017). **The role of play in children’s development: a review of the evidence** (research summary). Denmark: The LEGO Foundation.

Some cultural perspectives on play

Research across the world demonstrates that play is a universal activity of young children, regardless of their socio-economic and cultural context. However, play may be influenced by how a family or culture value play, and the extent to which adults play with their children. Marfo and Biersteker (2011) reported on the playful lives of children in Southern African cultural groups. They cite Sedite (2009) who highlights the important role that older children play in young children’s learning of traditional games, where play helps with the development of physical agility, concepts, as well as cultural and social learning. In relation to Shona games, Nyota and Mapara (2008) note that older children are instrumental in adapting games for younger children. Swart and colleagues (1996) describe a Ndebele practice in which children are encouraged to go around in stable mixed-age groups called ubungani, within which much learning takes place. Roughly translated, ubungani means friendship, comradeship, or playing together. Similar groups are known in Sotho

communities. The literature review and annotated bibliographies in Appendix 1 and 2 of this manual, include further references to the cultural aspects of play.

The cultural perspective that teachers of young children themselves grew up with significantly impacts on the way(s) in which they themselves will relate to young children and their play in educational settings. It is important that teachers understand this influence, and work towards embracing the prevailing theoretical stance that play can, and should, be the predominant activity of children in early learning settings, and that crucially, adults have a distinct role to play in facilitating playful learning.

Activity 4.5: Play and culture (20 minutes)

Purpose: To consider the impact of culture on ideas of play

Facilitation

Students read the following with a partner.

Whitebread *et al.* (2012) reports that Gaskins, Haight and Lancy (2007) have identified three general cultural perceptions or views of play which seem to have a significant impact on the pattern of children's play, and the level of involvement of their parents, as follows:

- ◆ Culturally curtailed play – in some pre-industrial societies play is tolerated but viewed as being of limited value and certain types of play are culturally discouraged. For example, in Gaskins (2000) study of the Mayan people in the Yucatan she found that pretence involving any kind of fiction or fantasy was regarded as telling lies.
- ◆ Culturally accepted play – in pre-industrial societies parents expect children to play and view it as useful to keep the children busy and out of the way, until they are old enough to be useful, but they do not encourage it or generally participate in it. Consequently, the children play more with other children unsupervised by adults, in spaces not especially structured for play, and with naturally available objects rather than manufactured toys.
- ◆ Culturally cultivated play – middle-class Euro-American families tend to view play as the child's work; play is encouraged, and adults view it as important to play with their children. The children also often spend time with professional carers, who view it as an important part of their role to play with the children to encourage learning. The style and content of this involvement varies, however. A study of mothers in Taiwan found that they directed the play much more than Euro – American parents and focused on socially acceptable behaviour, rather than encouraging the child's independence.

Reflection

Students identify which cultural perspective on play they experienced as a young child. Students discuss it with their partner in the following format:

- ◆ I remember ...
- ◆ My mother/grandmother/father/grandfather/care giver ...

Each student jots down some notes on the key points of difference between the way they were or were not allowed to play in pre-school, or the early grades, and what current research is advocating in terms of optimal child development through play.

These notes could go into the writing portfolio.

All these aspects of play combined provide a powerful argument and impetus for the implementation of a play-based approach (PBA) to learning in early childhood settings.

But important issues arise:

- ◆ We now have a broad understanding of what play might be, and of the importance of play in child development, but if play-based learning is to be seriously considered as an educational approach, then we need to understand it in greater detail.
In Section 5 we explore in depth what some of the principles of play might be, and how these can be used to create a play-based foundation for learning in ECD settings.
- ◆ If active engagement in play is required on the part of the child in order to maximise learning, and if in the light of the constructivist view of learning we want to work towards giving the child as much agency in his/her learning as possible, is there a role for the adult in play-based learning? If so, what is that role?

Section 6 looks at play as a continuum in the light of Vygotsky's notions of ZPD and MKO, which are helpful ways to think about and explore the adult involvement in children's play.

5. PRINCIPLES OF PLAY

Learning outcomes

Students will:

- ◆ Develop an understanding of the principles which are important in relation to learning through play
- ◆ Experience the different principles of play by engaging in, and reflecting on, active learning activities

Research carried out all over the world in many different countries and contexts shows clearly that play is an extremely important activity for young children. Educators have recognised this for decades, and many have worked towards putting forward approaches to education and creating and designing environments in which this kind of learning can take place. Examples are Maria Montessori in Italy, and Margaret McMillan and Susan Isaacs in England and Friedrich Fröbel in Germany, among others. Today, play is thought to be one of the most important activities that best facilitates children's construction of their own knowledge.

It is not only a natural way in which learning takes place, but it is now recognised as a valuable teaching tool, and a play-based teaching and learning environment can support and nurture children's learning in powerful ways. Research into the study of children's brains and brain processes also shows, from a different perspective, that playful experiences can strengthen learning. Despite this, as we have seen in Section 4, play is a very difficult thing to define in itself. Educators, academics and researchers often have different understandings of what they think play is, and it is important to consider different cultural and social contexts when trying to define play.

However, in general, there is agreement about which principles of play are important to think about when play is seen as a means by which young children engage in learning, and adults in teaching. The principles used in this material are not the only principles, but represent the most commonly agreed on principles, and those that are thought of as being most helpful to teachers.

These principles are:

- ◆ That play is intentional
- ◆ That play is inclusive, and can be differentiated to make sure that all children can take part
- ◆ That play invites children to be active
- ◆ That play is joyful and full of fun
- ◆ That children make their own choices about their play activities
- ◆ That children can lead, direct and control their own play activities
- ◆ That play is meaningful because it provides opportunities for children to understand and create meaning about their world

- ◆ That play is iterative
- ◆ That play is social and therefore communicative
- ◆ That play is a process

These principles apply to different kinds of play, whether it is free play, guided play or instructional play (discussed further in Section 6) and the various developmental stages of play; physical, pretend or symbolic play. These principles are a useful consideration in a play-based approach to teaching and learning because they are a useful way for teachers to:

- ◆ reflect on the play they see their children engaging in and learning from
- ◆ plan any kind of play activity
- ◆ create more playful classrooms which support learning
- ◆ check that the play activities they are planning for the children are, in fact, those that will support and nurture learning, and
- ◆ help assess children's learning by means of play.

Zosh and her co-researchers (2018) contend that each of these principles is supported by the current literature on young children's learning and is inherent in contexts that employ playful learning as the vehicle through which learning happens best.

The principles are not presented here in order of importance, they are all equally important, but they all need to be present in children's play and in play-based teaching and learning for children to benefit as much as possible.

We begin with the feature that most people associate with play, which is that learning through **play activities should be fun**.

Different people and different children will find different kinds of play fun. Fun can be conceived of as pleasure, enjoyable, in general strongly associated with positive emotion. With this feature the idea is that any child engaging in a play-based activity should do so happily and should experience a deep level of joy. We know when a child is happy: it shows in the body language of children, in the things they say and in the positive emotions they show while playing. Perhaps the child repeats the activity again and again to experience it many times. Perhaps the child often chooses to engage in that play activity over everything else available. Perhaps the child simply cannot wait to do the activity. All these are signs that the activity is fun. And when something is fun, motivation is high, the child is fully open to learning, and learning happens without seeming to involve much effort on the child's behalf.

Interestingly, research in neuroscience is finding that joy can be associated with chemical changes in the brain which promote or enhance learning.

Fun also relates to Vygotsky's Zone of Proximal Development. If a game or playful learning activity is too far out of the child's ZPD, it will be frustrating and anxiety provoking rather than fun to do.

On the other hand, if the game is too easy and presents no challenge, the child does not have to do any conceptual work, any of Piaget's cognitive accommodation, so important in

the learning process, and it often becomes boring. It also may not offer children an interesting opportunity to practise what they have learned. In both these cases play can lose its core emotion of joy.

Activity 5.1: Play is fun (40 minutes)

Purpose: To demonstrate the feature of play, that it should be fun

Materials: Rating scales (four for each student)

Facilitation

Students will play the game 'I Spy' which is a well-known children's game.

Students will use a very rough rating scale for 'fun' for this activity and will play the game in four parts.

Part One

Students **play this game in its original simple form** for two or three turns (or more if time allows).

Then they rate it on the 'fun' scale.

Not fun 1	Fun 2	Great fun 3	The best fun ever! 4
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Discuss the fact that for an adult there is not much of a challenge in this game, and the fun might soon die out of it.

Part Two

The game is changed. This instruction is given to the students.

In one minute, jot down as many names of objects that you can see easily around you.

Students then rate the game on the 'fun' scale.

Not fun 1	Fun 2	Great fun 3	The best fun ever! 4
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Students discuss whether Part Two is more of a challenge, and whether their rating of fun has changed.

Part Three

The game is changed again. The instruction is to **find one name of an object that you can see around you, for each letter of the alphabet.**

Students rate it on the 'fun' scale.

Not fun 1	Fun 2	Great fun 3	The best fun ever! 4
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Students discuss Part Three in the same way. Discussion should focus on if the rating of fun has changed, why could this be? It can also be related to the idea of ZPD.

Part Four

The game is made much more challenging. Students are to **jot down the names of everything that you see around you that contains the chemical element hydrogen.**

Students rate this on the 'fun' scale.

Not fun 1	Fun 2	Great fun 3	The best fun ever! 4
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Reflection

Students discuss the change in rating, and possible reasons for them. Relate the discussion to the idea of ZPD. Unless you are a chemist or a scientist, the game is now likely to be completely outside your ZPD or completely beyond your ability. How do you feel about playing this game now? Is there joy in it? You might be put off, or you might rise to the challenge, but it certainly changes the fun element.

Students look at the different ratings for fun that they gave the different versions of this game and make quick notes on: (i) did your 'fun' rating change with each different game? (ii) if so, how and why might the ratings have changed?

Is it possible for teachers of Grade 3 learners to ensure that all activities are fun?

The next feature of play is that it has a purpose, an intrinsic motivation as opposed to a rigid, pre-determined outcome, it is **intentional**. This means that play should have, from both the child's and the teachers' points of views, a purpose to it, even if that purpose is simply one of repetition, or of practising a cognitive skill. It is important to mention here the idea of **iteration**. This is when children play the same thing many times, when they go back to the activity so that they can try out possibilities, perhaps change the thoughts they have about what they are doing, and discover new things about the game or activity which will encourage new thinking. So, iteration is repetition with a purpose.

It is important to remember that there are different kinds of play and different stages of play, and the degree to which play may be intentional at any given moment, could be different in each.

Think of a child sitting in the sandpit simply pushing a small car up and down. While the child might learn something about wheels, it is not very clear what the purpose of this play activity is. But the child who plays with a car and is involved in making a bridge for it to go from one point to another, has a purpose to that play. The purpose might be to explore which materials make a good bridge, how strong a bridge must be, how long a bridge must be to get to a certain point, and so on. The child might go back to the car and the bridge many times in order to make these discoveries and try things out. The purpose of this play activity from the point of view of the teacher could be like that of the child, to learn about how different materials behave, about length, and so on. But play changes, change is part of the nature of play, and even in change there is still a purpose. So in this case even though the child's play might change in its nature or content, for example the child who is exploring

the idea of bridges, might make the bridge longer, or make it turn a corner, or try to hold many cars or heavier trucks, there is still a purpose to it.

Activity 5.2: Play is intentional (30 minutes)

Purpose: To demonstrate the principle of play that it is intentional

Materials: two dice and 5 rocks (or other counters) per pair

Facilitation

At a primary school level, a play-based learning game is 'Battle of the Dice'.

Students are put into pairs.

Each player starts with 2 dice and 5 rocks (or other counters).

The objective of the game is to capture all the other player's rocks.

Players take it in turn to roll the dice. Each player adds up the sum of his/her two dice, and whoever has the higher number gets to "steal" a rock from the other player.

Continue playing until one player has ALL 10 rocks.

Students are asked to play this game. If there are no dice, write the numbers 1 to 6 on small pieces of paper, in two sets. Each player is given a set from 1 to 6. When it is a player's turn, s/he turns over two pieces of paper, and adds the sum of the numbers shown.

Reflection

Ask the students to answer these questions. The responses should be written down in three paragraphs.

- ◆ Is there a purpose to this game? What is it?
- ◆ Can children learn anything by playing this game? If so, what?
- ◆ Is there a way to change or modify this game so that new learning might take place? Write down one idea.

This game is both interesting and challenging for children and encourages children's arithmetical thinking skills. It has a very clear intention or goal and has possibilities for iteration, for being played many times in different ways.

In addition, in guided play for example, the teacher might intervene and shift the purpose of the play activity in order to promote a skill or learning. Presenting or demonstrating this game or playing it with children in guided play gives teachers a chance to model a certain kind of arithmetic thinking. In this case, the teacher becomes the MKO (more knowledgeable other) in Vygotsky's thinking, someone to offer guidance through the game, or to facilitate the game appropriately, or to 'nudge' it in a new direction which may offer a possibility of new learning. This is especially true if the teacher wishes to change the game in some way to make it more challenging for children, or to show a different arithmetic idea.

This game also encourages children to engage in shared thinking and problem solving to practise arithmetic ideas (addition, larger than, smaller than) and so it has social learning value as well.

Notes to the facilitator

There is a wealth of studies dealing with the importance of play in the development of mathematical thinking.

Bobis, J. *et al.* (2010) Playing with mathematics: Play in early childhood as a context for mathematical learning. Paper presented at the annual meeting Mathematics Education Research Group of Australasia (33rd, Freemantle, July 3 – 7, 2010). Accessible at files.eric.ed.gov/fulltext/ED521030.pdf

Students can be invited to read them if they have an interest in this aspect of play.

The next feature of play, which is directly related to the feature of **inclusivity**, is that **it is differentiated**. Play can give all children with their many ways of thinking and learning, with different strengths and challenges, an opportunity to participate. In any one South African classroom now, there are children who learn differently to others, children who might have challenges and difficulties, or simply children who favour one medium of learning (visual or auditory learning, for example) over another.

The feature of differentiation means that activities in play-based learning should be designed and planned in such a way that any and all children can participate and benefit. The way the play is designed and presented to children should be such that all children can actively participate, including those requiring extra support or mediation with an MKO. There are children with learning or physical difficulties (movement, sight, hearing) children who have had limited opportunities or access to play activities, and children from a wide variety of different cultures, each with a different perspective on play. Play activities needs to support all children as equally as possible.

Activity 5.3: Play can be differentiated (30 minutes)

Purpose: To explore adapting a game or activity for students with different abilities.

Facilitation

Play this game called 'Sounds Interesting'.

Any number of people can play, but students will play in groups of 4 or 5 people.

The first person in the group chooses a single or double letter sound ('s', or 'ch' for example). S/he has to say whether they want the sound at the beginning, in the middle or at the end of a word. For example, "I choose the sounds 'sh', and I want it at the end of the word (as in the word 'wish')."

Each person in the rest of the group must think of a word containing this sound and present it to the group. However, they must present their word in any way OTHER THAN speaking it.

Everyone must guess what the word is with that sound in it. The first person in the group to guess the word, gets a point.

Then the next person takes a turn to present their word to the group.

When everyone's word has been presented for this round ('sh' at the end of a word) the person with the most points is the winner of that round.

The next person in the group now chooses a different sound and a word position for that sound.

The game finishes when everyone in the group has had a turn to choose a sound, and the person with the most points wins the game.

Reflection

Groups are to discuss:

- ◆ Does this game allow children with different abilities to participate, and in which ways?
- ◆ What might those different abilities be?
- ◆ How specifically does this game accommodate such children?
- ◆ Is it possible for a deaf or hard of hearing child to play this game as it stands? If not, how could the game be modified to make it accessible to such a child?

The next principle is that **play is meaningful**. Play gives children an opportunity to process and think, to test out and practise what they know, and to try and engage with what they don't yet know about the world. Play-based activities and experiences can help children to strengthen what they already know, as well as to discover and test out new ways of thinking about the world. In this way it supports them in their attempts to grow in their knowledge, understanding and skills.

Remember that the idea of 'meaningfulness' of play needs also to consider different social and cultural contexts in which that play is happening.

Play is social and communicative. It is in play that children find unlimited opportunities to share and communicate with each other. They share their understanding, they test out that understanding with others, and they may even change their understanding a little by having discussed it with others.

Even in solitary play, playing on their own, children may not be communicating with another person, but they are thinking about what they are doing while playing, and in this sense, it could be said that they are communicating with themselves. A body of research looking at play from many different aspects, from neuroscience to critical thinking, shows that social interactions that children engage in early in their lives, provide a critical foundation for later ongoing learning and development.

Activity 5.5: Play is communicative (20 minutes)

Purpose: To demonstrate the principle that play is communicative

Materials: Word cards (enough for 2 words for each student)

Facilitation

A game that requires direct communication is 'Pictionary'.

Students are to get into groups of 3.

Each person is given 2 words by the facilitator. The words are not to be shown to the rest of the group.

Examples are:

- ◆ Scrambled eggs
- ◆ Paper plate
- ◆ Hotel
- ◆ Birthday
- ◆ Full Moon
- ◆ Hairy caterpillar

One person in the group chooses one of the words and must either act out the word or draw it on a piece of paper. They have 2 minutes to do this, and then stop. The other group members must try and work out what the word is. The person who guesses correctly draws or acts out one of their words.

Reflection

Students discuss and answer these questions:

- ◆ What form(s) of communication is (are) happening in this game?
- ◆ Which of the principles of play discussed so far are present in this game, giving examples to justify their answers?

An important feature in play, and one that is easy to overlook in a busy early learning setting/classroom is that of **choice**. Research shows that to be most useful and beneficial for the child, play needs to be voluntary. It needs to be play of the child's choice and preference, and the child him/herself needs to decide (i) to do it, (ii) how to do it, (iii) to change it, (iv) how to change it, (v) when to stop, and so on. This is not always possible in a classroom, but as far as possible play-based teaching and learning should have a strong element of choice. At the most basic level, children can be given a choice between two or three activities. Another way to bring choice into an activity is to allow children to change the play activity on their own, amongst themselves or even working with a teacher. Children can and will, if allowed to, change the content of their play, the direction it takes, and the purpose of their play when they feel the need to. This is true even for guided play, where play facilitators make careful, thoughtful suggestions, based on their observation of what is happening in the play.

Activity 5.6: Play allows choice (45 minutes)

Purpose: To demonstrate the principle of play that it allows choice

Facilitation

Ask each student to think of a simple, easy game that they played again and again when they were a child.

Ask one or two students to share their games with the group.

Ask these students to briefly describe their game.

Students are asked to explain why they chose to play this game over and over as a child, giving very specific reasons.

Reflection

Ask the whole group to discuss why having a choice about what they play might make a difference to how children engage in play, and what children learn from or through it?

Ask how teachers could balance giving learners choice with the demands of implementing the CAPS (Grade R to 3) curriculum?

Students take notes during the discussion and add them to their writing portfolio.

Throughout the discussion and play activities that students have been involved in thus far, the feature of **agency** has been strongly present. Agency is of importance for children. Agency in play and play-based activities means that in engaging in play, children can lead, direct and control their own play activities. While they play, they are fully engaged, involved in the play or playful activity, and are thinking while they do it, even though that thinking may change and take different forms as the play progresses.

Even as adults, if we feel that we have some control in a learning situation, it feeds into our confidence and positive engagement. Positive emotion is an important source of energy for children during their development and learning in whichever context. Having some say in the play activity, and the freedom to follow a direction of their interest, helps to create a positive foundation for learning.

Having agency means that children are also **active** in their play. Well designed and presented play-based activities require that children take part, that they engage, that they do not simply sit and passively watch. As adults we learn by watching and listening, but we also learn above all, by doing, which is why the students are asked to play the games in this section.

In creating more playful classrooms, in introducing play-based activities into learning environments for young children, this is the aim, to support and promote the growing learning of young children.

Notes to the facilitator

Remember that in this course, we are **mirroring** with the students what we would like them to do in their classrooms/early learning settings. All the games that the students have played thus far have demanded their active participation in the way that playful activities should demand of children. The games, which are a form of play, have been intended to support intellectual, emotional and even social engagement of the students in the same way that playful activities support children's development and learning.

Activity 5.7: Principles of play (80 minutes)

Time to be active!

Purpose: To review all the principles of play that have been discussed.

Materials: Each group is given a piece of string, a lump of playdough and four kebab sticks.

Facilitation

Part One

Students are divided into groups of 4. Each group is given their materials. The group's task is to invent a simple game for **children aged 4 years old** where the following principles are clearly present. The game must be:

- ◆ Fun
- ◆ Intentional, it has a clear purpose which can be identified
- ◆ Accessible to as many children with different strengths and challenges as possible
- ◆ Designed so that all children participate equally
- ◆ Meaningful to children from many different social and cultural backgrounds
- ◆ Planned so that it promotes active engagement on the part of ALL children

Students are given 20 minutes to do this. The game also needs to be:

- ◆ written down as a series of 'steps'
- ◆ drawn out in a drawing or diagram,
- ◆ orally presented and
- ◆ demonstrated to the whole group.

Each person in the group takes on one of these tasks (writing, drawing, speaking and demonstrating) which makes sure that everyone in the group participates actively in inventing their game.

The small groups each present their games to the whole class. If there are too many groups, the facilitator chooses two or three games.

Reflection

After each presentation, the students discuss:

- ◆ Did the game demonstrate all the required principles of play?
- ◆ If not, which principles of play were absent in the game?
- ◆ How the game can be changed so that more of the principles are present in it.

Part Two

The facilitator chooses one of the invented games for the next part of the activity.

Still working in their groups, the task for the students now is to modify this game, in such a way that a literacy or a numeracy aspect is built into it.

Then students are asked to change the game so that it is suitable for **children who are 8 years old**.

Students have 20 minutes to do this.

One group volunteers to present their ideas about the way in which they have changed the game. The modified game is presented,

- ◆ as a written down series of 'steps'
- ◆ in the form of a drawing or diagram,
- ◆ demonstrated to the whole group.

Reflection

Students are asked to discuss whether the principles of play are still present in all three versions of the game.

6. PLAY CONTINUUM: FORMS OF PLAY AND THE ROLE OF ADULTS IN CHILDREN'S PLAY

Learning outcomes

Students will:

- ◆ understand how the play continuum links different forms of play
- ◆ understand how levels of initiation and direction define forms of play
- ◆ understanding why and how to foster agency in children
- ◆ understand optimal learning and ways in which teachers can mediate it
- ◆ analyse, adapt and apply learnings to their early learning settings
- ◆ think critically, problem solve, share and generate ideas for applying theory to practical teaching activities.

Continuum

'A continuous sequence in which adjacent elements are not perceptibly different from each other, but the extremes are quite distinct.' Oxford online dictionary.

'Something that changes in character gradually or in very slight stages without any clear dividing points' Cambridge online dictionary

'A continuum is a set of things on a scale, which have a particular characteristic to different degrees.' Collins online dictionary

The word 'continuum' is defined in slightly different ways in these three definitions, and a continuum of play captures something of all of these. We will explore this as we go through this section.

Play as a continuum

As we have seen there are differing theories as to what play is, but current research, and theorists working in the field of play, agree on a set of central principles common to all young children's play activities.

Section 4 looked at different types of play, and the different social stages of play that children pass through, and both could be placed on their own continua.

The continuum of play that we are discussing in this section is seen in terms of the relative roles of adults and children in their play. The role of the adult, or teacher in an ECD setting / classroom, in terms of children's play, is always in the service of promoting, encouraging and facilitating play for learning, i.e. play-based teaching and learning, but that role varies along the continuum according to the kind of play that the children are involved in.

The play continuum we are considering was put forward by Zosh *et al.* (2018) and works with four forms of play that range between the two extremes of 'free play' at one end, and 'playful instruction' at the other.



Figure 4: The play continuum

Direct, didactic instruction is not part of this continuum, although it relates at times to children’s learning, because it contains none of the essential principles of play reviewed in Section 5.

Also absent on the continuum is unsupervised play, which could precede Free Play. It is not included because as a rule, young children need to be supervised, even when the adults are not involved at all in the children’s play.

A principle of this continuum is that it is structured according to who starts the play, or initiates it, and who chooses and controls the play activity, or directs it.

‘Who’ refers to either teacher or child. On the continuum, it is the levels of initiation and direction relative to the child and the teacher, that are a deciding factor in terms of where the play is placed on the continuum (Zosh *et al.* 2017).

The continuum is an attempt to see play as a set of more finely distinct as opposed to broad entities, as well as to be more specific as to what is meant by children’s play in the context of a present adult as well as that adult’s role. Seeing playing for teaching and learning as a continuum allows a greater flexibility in thinking about play, and in working with play in an educational setting.

Working with a continuum of play also allows a sense that the kinds of play on it are not entirely or completely discreet from one another, that they can blend into each other in the context of one play experience, and it also captures a sense of the fluidity of play as it unfolds.

Zosh *et al.* (2018) describe the forms of play on the continuum:

*“In **free play**, the child initiates the play context and directs the play within that context. In contrast, if the adult chooses or arranges a context for learning, but the child directs the play within that context, we have guided play. **Guided play** can take the form of an adult playing with a child and offering scaffolding and guidance or an adult setting up a space or activity in such a way as to provide support as a child plays on their own (e.g., games). ... Guided play differs from free play in two ways: an adult helps to structure the activity, and the activity is centred around a learning goal. Critically, however, the child must still retain agency to direct the activity.*

*If a child initiates a context for play and then an adult intervenes to direct the play within that context, we enter **co-opted play**, not guided play. The child might have been interested in building a circus out of blocks, yet the well-intentioned parent swept in to declare that the animals were at the zoo, redirecting the child’s vision and robbing her of some agency in the play experience. When adults initiate and direct using playful elements, the scene more closely resembles direct instruction – even if it is dressed up in playful ‘clothing.’ ... Here a well-meaning adult decides that today, her child is learning about shapes and that she will be sure that she*

keeps the child on task by arranging the different shapes, counting sides, encouraging the child to place the blocks in appropriately shaped holes, and misses the opportunity to go on a “shape hunt” around the house.’

As the notion of a continuum suggests, there is often quite a fine line between the different forms of play represented on it and working with these differences is the real challenge for the adult, in this case the teacher. Whatever the differences between forms of play though, the central idea that as soon as the adult enters the play scenario in whatever role, it is always in the service of learning.

Because it is a continuum of play, however, aside from the principles of initiation, control and direction, the principles of play discussed in Section 5 still apply. If the activities in the different kinds of play are not:

- ◆ intentional
- ◆ inclusive, and can be differentiated
- ◆ inviting children to be active
- ◆ joyful
- ◆ meaningful to the child
- ◆ iterative
- ◆ social
- ◆ communicative

then for our purposes they are not play, and therefore do not belong on the continuum. This is especially true the further along the continuum towards ‘playful instruction’ the activity is located. Having the teacher involved does not mean that it should be less joyful, less social, or less iterative for example. These core principles of play can, and must, still be present.

What changes along the continuum is the extent to which the adult is involved in the play, and what role s/he takes on regarding the playing child.

The teacher in the playful instruction / learning situation in effect takes on the role of Vygotsky’s More Knowledgeable Other and is not present in order to rob the play of its central principles. This view of the adult role in play supports Zosh *et al.* (2018) who say that the adult’s role is one of purposeful support, rather than of leader. What form that support takes and whether there is an identifiable (from the adult’s point of view) learning goal, will help to locate the play activity concerned in its place along this play continuum.

Forms of play along the play continuum

Let’s look in a little more detail at the forms of play along the continuum as suggested by Zosh *et al* (2018).

Free play has the following principles:

- ◆ adults do not guide or scaffold the play

- ◆ there is no goal (from the adult point of view. One must allow that the child may have a 'goal' as conscious or otherwise as that may be)
- ◆ the child initiates and directs the play.

They give this example: 'children sit in front of a mountain of building blocks that are not designed to build a particular outcome, or when children construct a fort in the living room.' For school age children free play may take the form of physical play outdoors including spontaneous games with rules; pretend play taking roles they have seen like shop, shop, stop and go; creating clay and wire toys; board and card games.

Co-opted play has the following principles:

- ◆ the child initiates the context for play
- ◆ the adult intervenes to direct the play within that context
- ◆ this may be in order to somewhat extend the child's learning e.g. by asking a question, suggesting or by adding extra materials.

Zosh *et al*'s example: 'the child might have been interested in building a circus out of blocks, yet the well-intentioned parent swept in to declare that the animals were at the zoo, redirecting the child's vision.' Co-option can be helpful or not, depending on how the adult conducts him/herself, and how it is received by the child.

For school age children co-opted play would involve the teacher intervening during any of the free play examples above to question and extend the learning. The child/ren still have the choice to continue playing as they had been before the teacher intervened.

Guided play has the following principles:

- ◆ The adult chooses or arranges a context for learning
- ◆ The activity is centred around a learning goal determined by the adult
- ◆ The adult helps to structure the play activity in some way
- ◆ However, the child directs the play within that context, **the child still retains agency.**

Examples of this kind of play are: (i) an adult plays with a child and scaffolds or guides the activity. (ii) an adult sets up a space or activity in such a way as to provide support as a child plays on their own. Games are an example of this form of play.

In school age children this would consist of different 'stations' where learners do a different hand on activity at each related to a particular curriculum goal e.g. for maths, they might explore sorting things according to a number of attributes (Grade R CAPS: Mathematics content area Data Handling).

Playful instruction is different from guided play in the sense that:

- ◆ adults initiate and direct the activity, using playful elements
- ◆ the activity is 'pre-determined' in the sense that the activity is structured by the adult according to a specific learning goal
- ◆ the child is kept 'on task' in various ways by the adult, with therefore limited (but still present) child agency. This element is present throughout the playful activity.

An example here would be using a 'shapes board' to help the child fit a variety of sculpted blocks into their appropriately shaped holes.

For school aged children this involves making teaching and learning active, hands-on, problem solving and fun while still meeting the curriculum goals e.g. memory game for matching of different letters.

Activity 6.1: Forms of Play (40 minutes)

Purpose: to identify activities for each of the forms of play along the continuum

Materials: Newsprint sheets, markers and Prestik

Facilitation

Ask students to get into groups of 4.

Each group chooses either 5 – 6 years or 7 – 9 years and writes down an example of a free play, a co-opted play, a guided play and of a playful instruction activity, each on a separate sheet of paper.

The sheets are all put up onto the wall in the different forms of play, where they can be viewed.

Students walk around and choose one activity from one form of play that appeals to them.

Reflection

They return to their seats and make notes individually as to:

- ◆ the extent to which the principles of play outlined in Section 4 are present in their chosen activity.
- ◆ compare their own activity (in the same category) to the one they have chosen, in terms of whether each activity is a good example of that form of play.

These are collected by the facilitator, compiled into a document and distributed to each student. This becomes a resource for them that can be used on teaching practice.

A continuum is not a series of prescribed steps, one form does not progress from one to another, it is not a one-way street. In fact, the best way to view the play continuum is a series of possibilities that teachers can choose from, and to use them to the best possible advantage for the child's learning. Combining practices of allowing free play, intervening meaningfully in co-opted play, designing meaningful guided play, and implementing playful instruction, is strongly recommended in the literature on the role of adults in children's play.

Play is not static, there is often a backward and forwards movement along the continuum of play situations both within a given play sequence, as well as across different play instances over a day at school. Indeed, the adult can ensure that there is this movement in the way play is designed within the learning setting, thus providing children with opportunities for many forms of play.

Activity 6.2: Moving up and down the play continuum (40 minutes)

Purpose: To strengthen understanding of the different forms of play along the continuum and how they can shift from one form to another

Facilitation

Students are asked to consider the following free play scenario.

The children are playing outside. They are rolling, chasing, throwing and kicking a ball around the garden. The teacher observes the children but doesn't interrupt the game.

Ensure that the students agree that this is an example of **free play**.

Each student writes a short paragraph in which the adult intervenes to shift this play to **co-opted play**.

Each student passes his/her paper to another person. On the paper each student receives, they are to write another short paragraph in which the adult intervenes to shift the play to **guided play**.

Each student passes his/her paper to yet another person. On the paper s/he receives, they are to write another short paragraph in which the adult intervenes to shift the play to **playful instruction**. The activity must be planned to meet **either** the 0 – 4 years South African NCF outcomes:

- ◆ *ELDA 1 WELL-BEING. Aim 4: Children are physically strong and show interest and abilities in physical activities*
- ◆ *ELDA 4: MATHEMATICS. Aim: Children explore shape, space and measurement.*

Or the Grade 2 CAPS Mathematics

- ◆ Content area Space and Shape: Topic 3.1 Position, orientation and views
- ◆ Content area Measurement: Topic 4.2 Length(informal measuring)

Each student passes his/her paper back to the original writer.

Each student reads his/her original paper with the additions made by other writers.

Reflection

Students write brief notes on whether they agree with the changes made by other students on the following:

- ◆ Is the adult intervention appropriate in terms of its potential impact on the nature of the play?
- ◆ Does it meet the 0 – 4 years South African NCF outcomes/ Grade 2 CAPS skills?
- ◆ If so, justify your answer, if not, suggest ways that the play activity can be adapted to meet the outcomes while maintaining its playful nature.

Playful instruction tends to dominate the current landscape of play-based teaching and learning in South Africa, “despite play-based learning being mandated, workbooks and scripted lessons continue to drive pedagogical efforts, and play is often merely associated

with break time.” (Jensen *et al*, 2019: 24). Pre-determined sets of activities that are ‘delivered’ rather than explored through play in pre-school settings are the norm, rather than an approach which offers the child multiple opportunities to move up and down the continuum of play.

Notes to the facilitator

This could form part of the students’ writing portfolio:

Students read in the section ‘Lessons from the Science of Learning’, how Zosh *et al* (2018) spell out the benefits of guided play in terms of ‘academic’ learning. They choose one described benefit, and research it further using 2 articles of their choice.

Students develop a two-page summary of their research.

Zosh, J.M., Hirsh-Pasek, K., Hopkins, E.J., Jensen, H., Liu, C., Neale, D., Solis, S.L. & Whitebread, D. (2018). Accessing the inaccessible: Redefining play as a spectrum. *Front. Psychol.* 9:1124. <https://www.frontiersin.org/articles/10.3389/fpsyg.2018.01124/full#B69>

The South African on-the-ground reality of the role of play in learning is in direct contrast to this, and adults in ECD settings / Foundation Phase classrooms need to expand their awareness and understanding of other elements on the play continuum if our learners are to benefit maximally from their experiences in early learning settings / classrooms.

One of the ways to do this is to explore the notion of agency.

Agency

Agency

When a **person** acts on his/her own behalf,

The capacity, condition, or state of acting or of exerting power Merriam -Webster

The capacity of individuals to act independently and to make their own free choices.

Agency is when children feel valued and are confident to make their own decisions, do things independently, take control of their environment and voice their ideas.

In relation to agency, a consideration of the play continuum raises the questions:

1. Who has agency in which kinds of play?
2. What form can/does such agency take?

Activity 6.3: Defining agency (40 minutes)

Purpose: To explore the concept of agency in play

Facilitation

Ask the students the following question:

What does children having agency in play mean to you?

Students read the following text.

Students underline what they feel to be the key ideas regarding agency.

Each student to make annotated notes in the margins.

“Having agency does not equal ‘anything goes’ for children either at home or in education contexts. Agency in learning through play means seeing the child as capable rather than a blank slate to be filled (Daniels & Shumow, 2003). Agency is about the balance of initiative in the child adult relationship: are children’s interests listened to? Are they consulted on decisions that concern them? Do they initiate an activity and invite adults to join them in play and decision-making? In other words, what opportunities do children have for exerting their thinking and actions in a social context where others hold the same rights? Two dimensions may be helpful to consider: how planned the learning environment is, and how much the child and adult control the evolving ‘flow’ of activities.” (Zosh et al. 2017 p 14).

Reflection

Students share with a partner, identifying the ideas that they have in common. Where there are differences the students should explain their thinking and justify their positions.

Each pair should finish with a broad definition of agency.

Why is agency important in play?

Having agency in play means that children can:

- ◆ feel valued and appreciated by the people who are important to them
- ◆ feel confident because they can:
 - ❖ make decisions
 - ❖ do things by themselves
 - ❖ feel in control of their environment
 - ❖ give voice to their ideas and put them into action

Activity 6.4: Agency in children’s play (25 minutes)

Purpose: To identify agency in children’s play

Materials: Video clip

<https://aeon.co/videos/children-at-play-provide-a-rare-glimpse-into-the-imagination-ours-and-theirs>

Facilitation

Ask the class the following question:

- ◆ Who had agency in the ‘aeroplane game’?
- ◆ Can you see the principles of play mentioned above in this child’s agency?

Say where and how agency manifests.

Reflection

- ◆ Think of other examples of play activities which foster agency in children. Choose the age group of the children you are working with.

Notes to the facilitator

Student could add to their writing portfolio:

Write a response to the article featured below, commenting on the question of agency.

<https://www.theatlantic.com/health/archive/2011/10/all-work-and-no-play-why-your-kids-are-more-anxious-depressed/246422/> ‘

Jensen *et al.* (2019) emphasise the agency of the child in playful situations ...

‘Children’s engagement depends on their sense of autonomy. Having autonomy in a situation is about feeling ownership and making choices, rather than being free from all constraints. If we think of games, these have clear rules and within this structure, players can decide what actions to take. Free play may have few rules (though children can choose to invent new rules in their play), but like any social context, norms apply for what is acceptable, such as sharing among peers or voicing a want, and what is not accepted, like hitting.’ (p 20)

As to the ‘how’ of creating and maintaining this delicate balance within the adult/child relationship, they argue that the most optimal kind of relationship adults can build with children in terms of play is to be a ‘responsive adult’.

‘As facilitators, adults can adjust how much structure and scaffolding they provide. More structure means a smaller ‘possibility space’ and fewer choices to navigate. This may be ideal for a child embarking on something new, like learning to share or trying a game for the first time. Less structure means children have more room to direct their own actions. This way, they can practice a new skill or understand how a concept applies under changing circumstances. As children practice, facilitators are present and ready to offer support when a child might be struggling. A responsive adult ‘build(s) on what children know and care about, spark curiosity, and deepen children’s understanding of new ideas, skills and content. When children are engaged, they (the responsive adult) bring themselves into a learning activity, often by thinking of ways to enrich the experience and take the activity even further. ... we call this style (of interacting with children) facilitation. Facilitating children’s learning is different from thinking of teaching as ‘delivering content’ because the goal is for young children to understand concepts and develop a breadth of skills they can apply. Culture clearly shapes the relations young children have with adults; even so, research finds that engagement is at the heart of human learning and growth across cultural settings.’ (p 19-20)

Agency is critical as a core feature of playful learning, but many teachers find it hard to share or hand over agency to children, especially young children. This is because it involves a

kind of 'letting go' of power, and of traditional and deeply felt ideas as to who children are and how they learn. It involves, crucially, having a level of trust in children's ability to 'design' and implement their own play activities, or to be co-designers and implementers of play activities in the interests of their own cognitive, social and emotional growth. This trust on the part of adults rests on what our image of the child is, which is often informed by how we grew up, what the role was of the adults in our own lives as children, especially with respect to play. Loris Malaguzzi, founder of the Reggio Emilia approach to education puts it thus:

"There are hundreds of different images of the child. Each one of you has inside yourself an image of the child that directs you as you begin to relate to a child. This theory within you pushes you to behave in certain ways; it orients you as you talk to the child, listen to the child, observe the child. It is very difficult for you to act contrary to this internal image. For example, if your image is that boys and girls are very different from one another, you will behave differently in your interactions with each of them." ('Your Image of the Child: Where Teaching Begins' Loris Malaguzzi 1993, p 1).

In some sense then, many teachers will have to 're-learn' what it is to enter a playful relationship with children.

This has profound implications for the way teachers need to approach their task of facilitating play. Teachers need to:

- ◆ Be very observant of children, and of the way children are conducting themselves in the world, relating to others, making choices, voicing likes and dislikes and so on.
- ◆ Think carefully about their relationships with the children and reflect on what these relationships are built on. Is it trust? What are the power relations within that relationship?
- ◆ Reflect on what they see their role with children in educational settings to be. To control? To facilitate? To direct? To fill empty minds? To be a co-investigator?
- ◆ Think carefully about the way in which learning environments are designed, and activities are planned and implemented.

Activity 6.5: Play activities and agency (30 minutes)

Purpose: To explore the relationship between forms of play and levels of agency

Materials:

ALL students are given the following:

- ◆ a ball
- ◆ a small block of wood
- ◆ a toilet roll inner
- ◆ a piece of string

Facilitation

Students get into groups of 3 or 4.

One half of these groups (Task A) is given the Instruction

- ◆ Given this set of objects, design a **guided play activity** that gives children **maximum agency**. The constraint is that the activity has to have the learning goal of helping children explore and understand the properties of 3-D objects, (for example: round objects like cylinders and balls roll because their sides are curved; and boxes slide because they have flat sides/surfaces. (From the content area 'Space and Shape' in Grade R CAPS Mathematics).

The other half of the group (Task B) are given the Instruction

- ◆ Given this (same) set of objects, design an **instructional play activity** that gives children **minimum agency**. The constraint is that the activity must have the learning goal of helping children explore and understand the properties of 3-D objects, e.g. round objects like cylinders and balls roll because their sides are curved; boxes slide because they have flat sides/surfaces. (From the content area 'Space and Shape' in Grade R CAPS Mathematics).

Reflection

Choose one group from Task A, and one from Task B. Each group says where their activity lies on the play continuum.

Each of the chosen groups presents their activity.

The class discusses the differences between the two groups' activities in terms of children's agency and tries to identify what it is that creates that difference.

Students discuss and answer the questions, making notes during the discussion:

1. What scaffolding is offered in the activity from students in Task A?
Describe the scaffolding techniques.
2. Does the scaffolding contribute to the child's agency?
If so, in which way(s)?

In Section 7, we pick up on the 'how' of playful instruction, or play-based teaching and learning, and examine in more detail the implications outlined above.

7. HOW TO IMPLEMENT A PLAY-BASED APPROACH TO TEACHING AND LEARNING

Purpose

The purpose of this section is to find out what contributes to effective play-based teaching and learning. This section includes how to plan, set up the learning environment, use intentional teaching strategies, assess in play-based ways and to understand the importance of reflection.

Learning outcomes

Students will:

- ◆ understand and critically review the play-based approach to teaching and learning cycle
- ◆ understand that planning plays a critical role in the provision of quality play-based learning activities for children and how it supports optimal learning, classroom management and teaching satisfaction
- ◆ understand that the process of planning including observing and preparing are important first steps
- ◆ explore intentionality in the context of planning for play-based teaching and learning
- ◆ consider the importance of setting up and resourcing an ECD environment/classroom to facilitate play-based learning
- ◆ develop strategies for implementing play-based teaching in an ECD setting/classroom
- ◆ understand scaffolding and look at ways of how to scaffold in play-based teaching and learning ' including intentional and responsive teaching
- ◆ consider the qualities of courage, creativity, curiosity and the ability to form good relationships in play facilitators
- ◆ learn about how to conduct play-based assessment including observing and other ways of gathering and analysing information
- ◆ evaluate and reflect on teaching practice and use of the PBA cycle to improve practice
- ◆ think critically, problem solve, share and generate ideas for applying theory to practical teaching activities.

The next five sub-sections explore the practicalities of play-based teaching and learning, how we plan, set up, teach, assess and reflect, and Figure 5 below will be our guide:

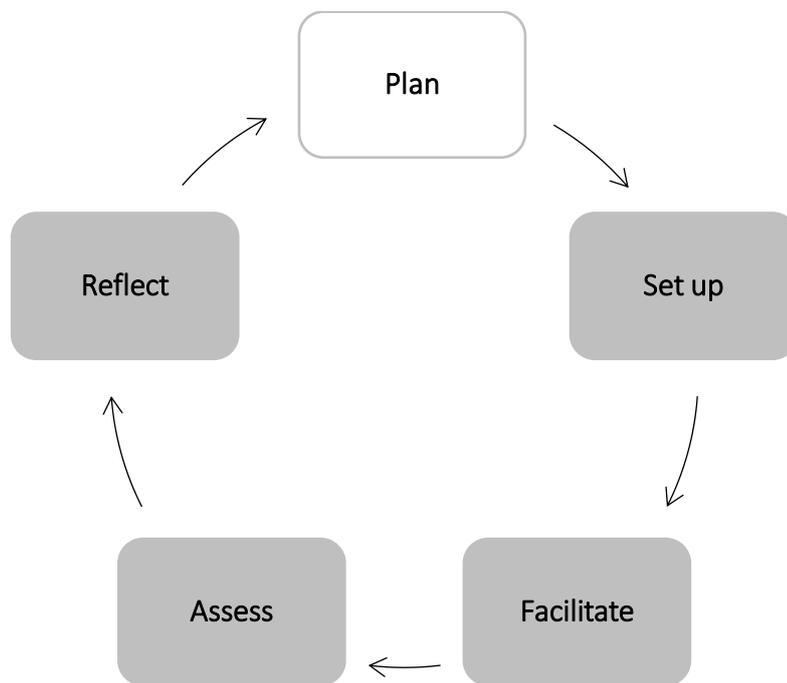


Figure 5: Play-based approach (PBA) teaching and learning cycle

The play-based teaching and learning cycle

The play-based teaching and learning cycle is:

- ◆ planning what is to be done, for example making decisions about which form of play, which play materials, setting a learning goal or not, and so on
- ◆ setting up/preparation of the play environment
- ◆ working with the children, teaching or facilitating play-based learning
- ◆ assessing, or gathering and analysing information obtained in various ways through the play process
- ◆ understand the importance of reflection in play-based teaching and learning,
- ◆ re-engaging with the PBA cycle, and moving through many such cycles as the play progresses

Reflection informs every other element. This will be discussed in detail in the section on reflection in play-based teaching and learning.

In a real play situation with a child, facilitating play-based teaching and learning involves a constant moving through and within such a cycle, and in this way, planning occurs at many points in the cycle. So, in this sense there are no 'fixed' starting and end points, but planning is a very good place to begin.

PLANNING PLAY-BASED TEACHING AND LEARNING ACTIVITIES

The game of chess is probably the most famous example of strategy-based playing, and much has been written about it. One of the most written about aspects of chess is what is known as the ‘opening move’, how the players begin their game.

An opening move is a plan, and the plan is built around a specific goal, which is to capture the king of one’s opponent. There may of course be ‘mini-plans’ along the way, smaller steps which one takes towards the main goal.

But once the initial move has been made, one may or may not continue with one’s original plan. The plan may be followed to its conceived end. It may be modified many times; it may change completely. All this depends entirely on the response of the opponent, one’s game partner.

Similar thinking applies to play-based teaching and learning. As teachers, we set up a play environment, in guided play and playful instruction we have a learning goal, and we work towards that goal with the child, using play as the chosen tool for teaching and learning.

But once the play has started, how the play takes shape, what direction it follows, where we take it as good play facilitators, depends on the response of the child. And so, there may be changes along the way, there may even be a complete change of plan. Good play facilitators allow this, and do not stick rigidly to their plan. A plan is a guide, but we need to remember that we are dealing with living, growing, developing human beings, who are not necessarily wired to follow our plans.

Even at the furthest right-hand end of the continuum, where the teacher initiates and directs play in playful instruction, there must be a degree of responsiveness to what the child does during play for the child to gain maximum cognitive benefit from the play experience. We will discuss this in greater detail in the sections on teaching and assessing learning through play, but flexibility needs to be a built-in feature of any play-based teaching and learning plan.

Activity 7.1: Responsiveness (15 minutes)

Word Square Pen and Paper Game

Purpose: To reflect on the concept of responsiveness to play partners

Materials: A 4 x 4 square grid on a piece of paper (one for each student)

Facilitation

Students get into groups of two or more players.

Each player begins by drawing a four space by four space square on a piece of paper and hiding it from the other player(s).

The players take turns calling out a letter.

As each letter is called out, players must write the letter somewhere on their grid. The goal is to make as many four-letter words as possible.

Letters which have been called out already may be repeated.

When all the grids are full, players disclose their grids and count how many four-letter words they were able to create vertically, horizontally, and diagonally.

The player with the most words wins the game.

Reflection

Discuss how each decision was informed by the one before and how an initial plan might be changed as turns proceed.

How might this apply to your planning ?

What is involved in planning?

- ◆ Planning for play-based teaching and learning is framed by the following general considerations:
 - ❖ Our image of the child, how we see the child as learner (see Section 6)
 - ❖ The children's context, their social, linguistic and cultural backgrounds, including the values that are important to the caregivers and community, and the potential influence of factor such as illness, poverty, violence at home and other barriers to learning.
 - ❖ The children's stage(s) of development, for example where they seem to be in their physical development, the stage of social play they seem to be at, and so on.
 - ❖ What the children already know, what they seem to be on the verge of knowing (their ZPD) and what they don't yet have any knowledge of.
 - ❖ Do any children have known special needs, for example sight, hearing, behaviour, intellectual or other difficulties?
 - ❖ The children's interests.
 - ❖ The resources and opportunities available to the teacher at the time.
- ◆ More specific considerations in planning are:
 - A consideration of goals.
 - There are two primary goals in planning any play-based learning:
 - ❖ The first is the general goal of making sure that the principles of play explored in Section 5 are present in the plan.

If the following principles are not present, then we do not have play, we have 'delivery' or 'instruction'. Remember that the principles include that play needs to:

- **be joyful** for children.
 - **be meaningful** for children.
 - **actively and deeply involve the children** in their own learning.
 - **be iterative** i.e. offer different ways for the children to repeat what they are learning.
 - involve **social** interaction
 - give children **agency**
- ❖ The second, more refined goal is to consider whether as teachers, we have a **specific learning goal**.

Not all play-based learning has a specific goal.

If we feel that we want the children to have an opportunity to practice or explore a concept such as height, weight, balance in as open a way as possible, we might plan a free play situation setting out suitable materials. This is a more generalised goal.

At the other end of the play continuum (Section 6) if we want children to learn something specific about e.g. measurement, we might plan a session of playful instruction, where the teacher initiates and takes the lead throughout. We may use the same materials, but the kind of play is very different, because our goal is different.

Checking what kind of play we want to engage the children in helps to make sure that we are, in fact, still playing.

However, there is always a possibility that we need to be open to, which is that the planned learning goal may change. As we engage in the play we have planned and set up for, our ongoing assessment of the response of the child(ren) might necessitate a change in the learning goal, with an accompanying modification of our plan. **At this point the 'assessment' element of the diagram has entered planning.** Such modification should always be based on the learning needs and interests of the child, and not on those of the teacher.

There is nothing wrong with a teacher redirecting play, indeed this is what co-opted play is all about.

An important part of identifying a specific learning goal in the South African context, is looking at what is required in terms of the curriculum (NCF and CAPS). Where teachers must follow the curriculum, they need to try and match curriculum themes and topics with the children's interests and the teaching and learning context.

Activity 7.2: Teacher needs versus child needs - Debate (30 minutes)

Purpose: To explore the relative needs and wants of children and teachers in educational play-based settings.

Materials:

- ◆ NCF curriculum documents
- ◆ Foundation Phase CAPS documents

Facilitation

Introduce the debate issue to the students:

There is often a tension in a learning environment between what the child needs and wants in terms of their interests in the service of learning through play, and what the teacher needs and wants in the service of learning objectives and working within the curriculum.

Are there circumstances under which these might conflict? How can this be resolved?

Set up a class debate. Divide the class into 2 teams.

One team argues that the teacher's needs and wants should prevail.

The opposing team argues that the child's needs and wants should prevail.

Students should use the following to construct their arguments:

- ◆ A claim, for example the teacher's needs and wants should prevail
- ◆ A support for that claim, (i) reasons which outline the logic of the argument, and (ii) evidence, the established body of facts.

Here the teams should refer to the theories of play presented in Section 4, and any other readings they may have done.

They should also refer to the 0 – 4 NCF and the CAPS Foundation Phase curricula

Access these at www.education.gov.za (Curriculum tab)

Reflection

Students are to make notes (i) summarising the main arguments from each team, and (ii)

Interesting features or points made during the discussion

- ◆ Planning needs to consider the forms of play the teacher and the children will engage in, where we want to be on the play continuum, and what general or specific learning purpose will be served by that choice.
- ◆ Planning also involves thinking about which materials/toys/apparatus/activities will best serve the purpose or goal, and the kind of play chosen? In other words, it considers the choices made above.
- ◆ Planning should consider also which physical spaces within the learning environment the children will use, for example, inside vs. outside, a large area vs. a small corner.
- ◆ The configuration of children within the choices made above is also important. Are we planning individual play, small group play, play in pairs, whole group play, and so on? Which is best suited to the choices made above?

Planning, it is clear, is no trivial or easy task, but one that involves crucial decisions made based on careful thought, and a consideration of many factors.

The notion of an 'intentional' teacher will be explored in Section 7 (Teaching in a PBA), but to briefly introduce the concept here is relevant because an intentional teacher is centrally concerned with planning. Such a teacher is one who works consciously "with the outcomes for children in mind and seeks out every opportunity to help children achieve these

outcomes through the learning experiences (they) plan, the ways (they) interact with children, and the ways (they) create and regularly modify the environment.” (US Department of Health and Human Services, Administration on Children Youth and Families, Head Start Bureau (2003:21).

How does an intentional teacher plan?

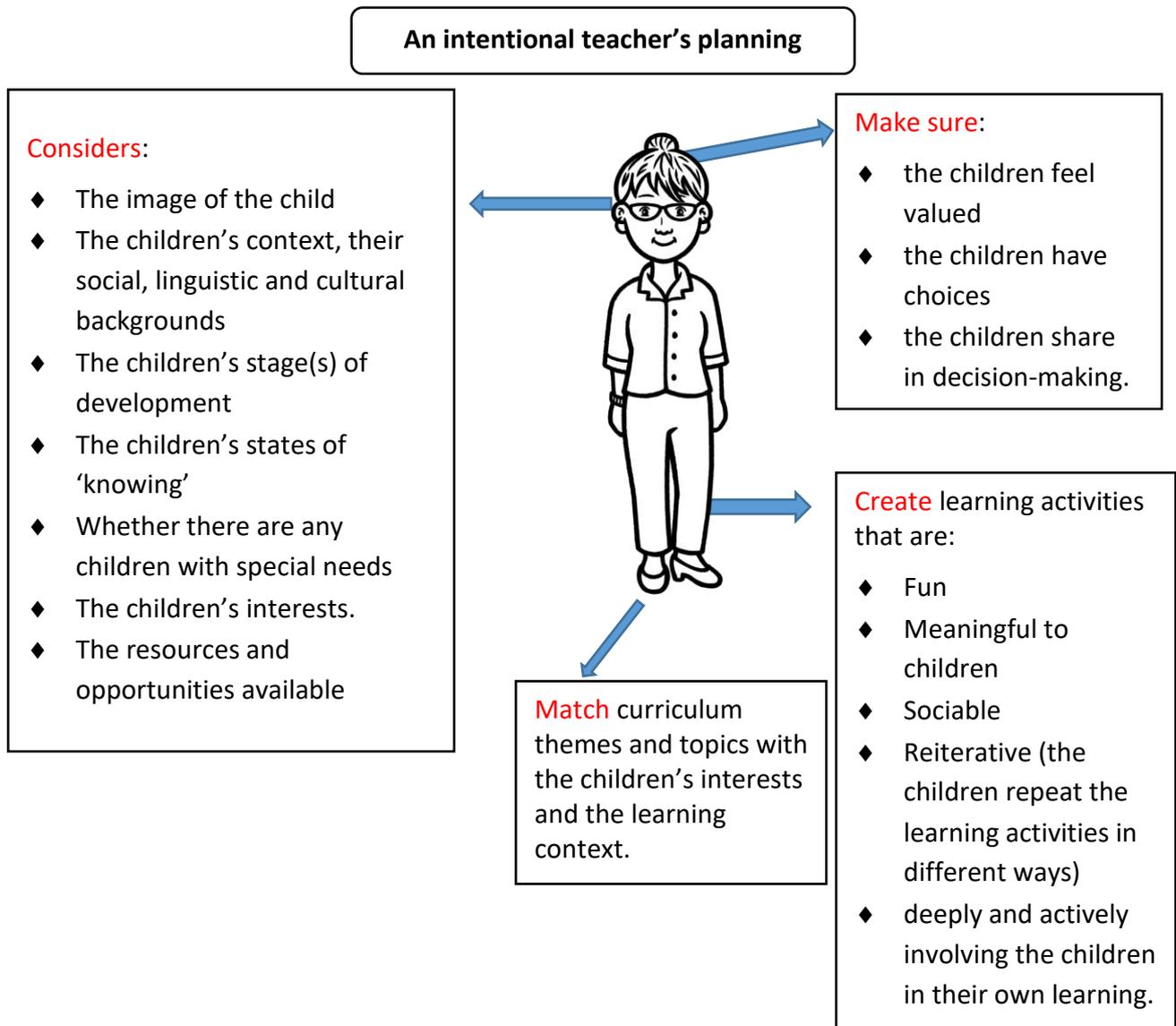


Figure 6: An intentional teacher's planning

Activity 7.3: Planning a play-based activity (60 minutes)

Purpose: To design a play-based activity given specific conditions.

Materials

- ◆ Newsprint, markers, Prestik, staplers, tape, glue, scissors, balls, rope, scraps of cloth, dolls, soft toys, blank paper, crayons and recyclables such as tins, bottle tops, sticks, milk cartons, cardboard boxes.
- ◆ Copies of the CAPS Foundation Phase curricula

Facilitation

Students are given the task, in small groups, of planning a play-based activity using the following information:

- ◆ The children you are working with live in an informal settlement without basic facilities.
- ◆ They are 7 - 8 years old, a mixed gender group, speaking many languages at home.
- ◆ Two children in the class have hearing difficulties.
- ◆ You have access to copies of the CAPS Foundation Phase curricula

Each group presents the plan for their play activity, outlining:

- ◆ Which principles of play are present, and how they have been built into the plan?
- ◆ What kind of play has been planned?
- ◆ Where this activity falls on the continuum of play?
- ◆ The learning goal for the play activity
- ◆ Which materials will be used and why?

Reflection

The whole group critiques the plans constructively, and the creators of the plan make feedback notes on their plan.

Each group's plan is copied, and all plans are compiled into a booklet given to each student for future use on teaching practice.

SETTING UP AN ENVIRONMENT FOR PLAY-BASED TEACHING AND LEARNING

Preparation is at the heart of good teaching, and preparing an interesting, stimulating and playful classroom environment in which children can play to learn is no different.

Teachers need to plan play-based learning well, and in order to do so they must very carefully and deliberately ‘set up’ or prepare the environment for play. Using a play-based approach to teaching and learning requires the teacher as well as the environment itself to encourage and support play as an integral part of the daily programme, and not an ‘add on’, or something one does for example every Friday.

Both NELDS (National Early Learning Development Strategies for children birth to four years) and the CAPS document for Life Skills in the Foundation Phase state that opportunities for active play are an integral part of teaching practice.

Setting up is part of the cycle first presented in the introduction to Section 7.

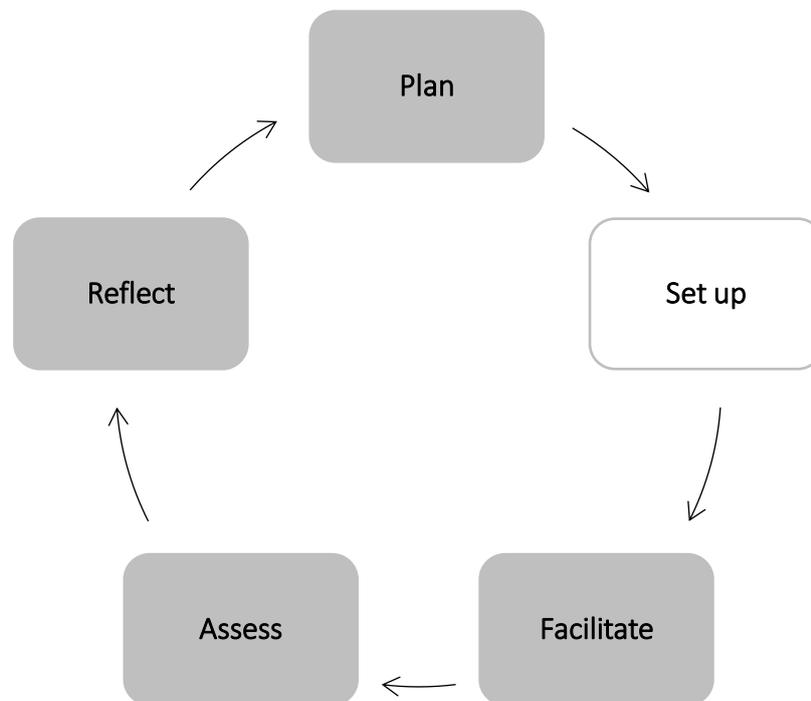


Figure 7: Play-based approach (PBA) to teaching and learning cycle – Set up

Set up is the most logical ‘next step’ following decisions made in planning and should be directly informed by these choices.

We know that the classroom environment is much more than what we see. The quality of teacher-child relationships, the quality of experiences that the children have access to, and what the teacher thinks about how learning grows and develops in children, are all in the important background of a classroom environment that aims to support play-based teaching and learning.

Remember though, that just like planning, setting up also needs to have a degree of built-in flexibility in order to respond to ideas and changes that observation and reflection carried out during play reveal.

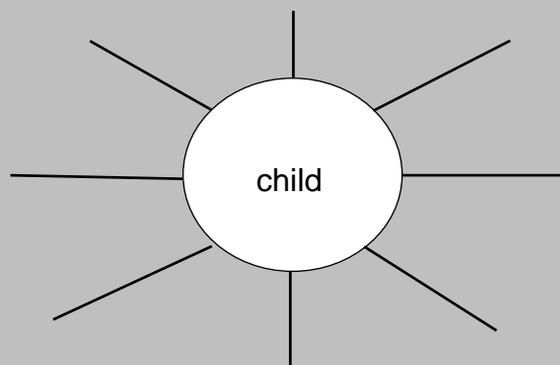
The first consideration is in the teacher's own attitudes. His/her image of the child. What s/he thinks about the idea of play-based learning, how s/he sees the children, and how s/he sees her/himself as the facilitator of play-based learning will affect all the ways in which s/he goes about preparing the learning environment. How teachers see children, what image they have of children is the starting point for planning and setting up for play-based teaching and learning.

Activity 7.4: How teachers see children (25 minutes)

Purpose: To explore what image teachers have of children as a starting point for planning and setting up in play-based teaching and learning

Facilitation

On a piece of paper, each student makes a mind map. In the centre of the map is the word 'child'.



They write down words that for them describe children and children's learning, thereby answering the following questions:

- ◆ What is a child?
- ◆ Do children bring anything into the world with them, if so what?
- ◆ How do children learn best?
- ◆ Can children be trusted?
- ◆ Should children be allowed to direct their own learning?
- ◆ What do I see as some of the positive characteristics of children?
- ◆ What do I see as some 'limitations' of children?

Reflection

In small groups compare their ideas about children. Each student can add contributions of interest from other group members to their mind map.

Notes to the facilitator

This writing can form part of the students' writing portfolio

A teacher who sees the child as someone who must passively wait for the teacher to engage in anything, who cannot take control of a play situation and direct it, or who cannot make choices about play, for example, will set up a learning space that is limiting for the child in many ways. It is not going to be a space that will facilitate a play-based learning approach.

On the other hand, a space that is set up by a teacher who believes and trusts that children can learn actively through free interaction with materials and teachers in a partnership, and who believes that play is a powerful learning tool will set up a very different looking classroom.

Setting up requires an active teacher, one who is open and curious and who is constantly engaged in reflection. An environment is constructed, and created, and grows out of what you think and feel about the children you work with and critically on the relationships developed with them. An environment can thus be free of rigidity, and 'sameness' from day to day, and instead becomes a unique and fluid, responsive place, responding to what occurs in it daily. It becomes essentially a teacher and his/her classes' own space.

In the same way, a teachers' understanding of different forms of play that children need to engage in, and the teacher's choices about what roles s/he will take during play with children, can be seen in the way the learning environment is set up.

In this sense the environment is a direct mirror of the teacher's thinking about children's learning, and about his/her plans for play-based teaching and learning.

So, let us assume that we want to give children a learning experience based on play, and we understand that we will be facilitators in this learning. There are several factors to think about when we set up a space for play-based learning.

We will consider them under the following headings.

- ◆ Physical environment, which includes outdoors as well as indoors
- ◆ The psychological/emotional environment
- ◆ The materials placed in the environment

But first, it is useful to think about some general points.

General

- ◆ A learning environment is where both teachers and children will spend much time, and so it needs to be a place that everyone who uses it can relate to. Learning environments should be nurturing spaces that support the development of all children.
- ◆ How the environment for play-based teaching and learning is set up generally shapes the way play unfolds, and how children direct their play, both inside the classroom and outdoors.

- ◆ Set up plays an important role in the way children feel about play, how they behave towards one another, how they communicate with one another in play partnerships, and how they engage in play.
- ◆ All environments available to the child have the potential to support children’s learning, and so the outside as well as the inside environment is important to think about.
- ◆ Even when play is ‘free’, with children taking the initiative as to what and how to play, the space, the materials and the people to play with provide a certain structure, or some necessary physical, social and emotional boundaries.
- ◆ If it is reflective and responsive to the children it embraces, the environment also must be at least to some extent, and for important reasons, a reflection and responsiveness to the culture that the child lives in. As we saw in Section 4, research is clear that there are cultural differences in play, and while we want to give children the opportunity to extend and explore and encounter novelty in their lives and in their play, there also needs to be a level of familiarity where children can feel understood and safe. (Kritchevsky, Prescott, & Walling, 1977; Loughlin & Suina, 1982).

Many current approaches to education are known for their attention to how educational spaces can be thoughtfully arranged in order to give children the best possible benefit (e.g. Montessori, Reggio Emilia, Waldorf). Within these approaches, space is one of the most important means of supporting children’s learning and exploration.

“The environment is the most visible aspect of the work done in the schools ... it conveys the message that this is a place where adults have thought about the quality and instructive power of space.” (Gandini, 2003: 1) and by extension for our purposes, the quality and instructive power of play.

Physical environment

Environment can be defined as the physical environment, its surroundings, and a specific setting or context.

Some of the principles that should be considered in the physical setting up of a play-based teaching and learning environment include:

Indoors

The indoor area needs to meet certain requirements in order to facilitate children’s learning through play:

1. It should be **well organised, comfortable**, have things in it that are **recognisable** to the child and to the teachers working in the space with the children.
2. There should be plenty of **room**, or as much room as possible for children to move around in and to play in various ways, and in different social constellations.
3. The amount of **light** coming into the room(s) and where it comes from is important. Light not only allows children to see more clearly, but it also creates a good feeling in the room.

4. The amount of **noise** is also important. Noisy vs. quiet areas are good to think about so that children can play in different ways and in different social partnerships.
5. The size of the space, but more importantly how the space is used, and **how things are arranged** within it, both indoors and outdoors will have an effect on children's freedom to choose their own activities. This will then effect whether or not they extend and expand their play, how far they can use it to explore an idea, and whether they can engage in different kinds of play. How space is designed encourages or discourages ongoing developing play. Small, squashed, badly designed play areas can make children irritable and uncomfortable, and does not allow them to put their energies into their activities. If available space is small, it can nevertheless still be well designed and facilitative of children's play.
6. **Flexibility** is also important. What works for one group of children may not work for another, children need changes to keep them interested and focussed. In this sense the design of the classroom is never complete, but changes all the time as the children respond to the activities, and as their learning needs change.
7. **Different learning spaces** can be very useful. Some play activities are better for large groups, other are better explored in smaller groups or in one-to-one partnerships, so allowing spaces for large group, small group and individual play opportunities in terms of classroom layout is important. Children are different in their own needs and learning styles. Each space within the bigger overall space of the classroom, should also be considered in a way that invites children in, and encourages engagement with the play materials.
8. **Desks** predominate in most Grade 1 to 3 classrooms which is challenging to a play-based activity driven pedagogy. Teachers could rearrange the desks into groups of four facing each other, two on each side to encourage small group working. It is recommended that some space is created for open movement and activities. This could be difficult in small spaces. To facilitate guided play set up interest areas with concrete and print materials (e.g. a maths, nature or science tables) with pinboards or wall space to be provided for exhibits, children's work and posters. These could be set up in open spaces such as on the verandah, in a wide corridor etc if space is limited. A wash line with pegs can be used to display work.

Outdoors

1. Because of the importance of physical play in young children, and because of the role that physical knowledge of the world plays in helping to lay a foundation for further learning, and other kinds of play, setting up an outdoor environment is just as important as the inside environment, however small or limited it may be.
 Teachers need to give children the opportunity to play with toys or objects and materials or games outdoors, in the same way as those indoors. Working with outdoor materials such as sand, water, ropes, boxes, sticks and so on, are opportunities that extend the child's engagement in play, and provide different interesting play opportunities. Bringing things such as construction materials that are normally considered to belong inside and introducing them outside, can extend a child's learning environment. Thinking about moving things between the two environments, either for a short time, or for longer periods can help teachers to think more carefully about the

two different environments, how they may relate, and what play opportunities they can offer children.

2. It is important to think about what kinds of play are possible outdoors, and to have materials and activities there that facilitate these kinds of play.

Outdoor play also has a social impact, and a number of new relationships between children can be made possible outside.

3. Paying attention to the kind of play activities and kinds of play that will be suitable for outdoors means thinking about children's physical movement, construction, sensory exploration and manipulation. If we think back to Section 4, physical play is not only an important part of young children's play, but it is often the basis for a range of kinds of play in an ECD/ FP school environment. What can be put outdoors that cannot be placed indoors or that will not work indoors, needs to be thought about, and vice versa.
4. Indoor and outdoor kinds of play can be thought of as complementary to, or helping one another. Children using the outdoor space, however small, can play in a way that helps them to explore and ask questions and to think about things that they can then take indoors into different play activities and materials to try out in a different way. For example a child who is playing a balancing game on a plank, exploring what her own body does, may take the idea of balance inside, and work with it and extend it in her next construction activity with blocks.

It is worth remembering, as a last word, that in Whitebread's review of some of the literature,

"in their play, children appropriate different spaces and features within their environment which are quite unpredictable by adults, and that the richest play spaces are mostly natural and unplanned. Many urban playgrounds, designed by adults, are often too neat and tidy, and essentially often rather barren as regards playful opportunities. The most successful urban play environments are 'adventure playgrounds' which are set up so that children can adapt them and build their own spaces, using a range of natural and man-made building materials (Bartlett, 2002)."

Some lessons can be learned from this in terms of setting up an outside environment, and in not holding on to an adult view of what constitutes a 'good' play space, nor to a set up that adults expect to remain that way, and instead to allow children the maximum possible input on what they themselves regard as 'good' spaces to play in.

Activity 7.5: Transforming a Foundation Phase Classroom (30 minutes)

Purpose: to develop strategies for transforming a desk filled space into one suitable for play-based learning

Materials: Pen and paper

Facilitation

Working in small groups students describe classrooms they have seen or worked in; discuss and jot down ideas for transforming the classroom to address the principles of play outlined in Section 5 with special consideration of different children's needs.

Reflection

In plenary the small groups pool their ideas to make a list of recommendations to make traditional desk filled classrooms more amenable to a PBA. Students can try some of these during teaching practice.

Emotional environment

It is as important to think beyond the physical aspects of the classroom to ‘**emotional safety**’. A child who feels welcomed, secure and has his/her emotional needs met is more able to pay attention, and to give positive energy to playing, and therefore to learning and developing.

We must therefore ask ourselves what values we want to communicate in our environments to the children who use them. We should think about how we want children to experience their time in our classrooms. Do children feel excited, curious, drawn into something interesting and good? Are there play activities that make children feel this way?

Activity 7.6: Creating a welcoming PBA environment (30 minutes)

Purpose

To practice setting up welcoming play environments for learners of different ages and from different backgrounds

Facilitation

Students to group themselves according to the contexts they lived in as a child, for example, a city suburb, a rural village, a township, a coastal town, an informal settlement or an apartment complex. It may be necessary to form several groups from the same context.

Students are to choose an age group and then to think of the physical, cultural, social and family background that they themselves come from, and imagine that they are setting up a welcoming, exciting and safe environment for children from the same background.

They are to think of 5 things they would do to make this environment as welcoming as possible, and to give reasons for their choices. They are to think specifically of furniture, play materials, the arrangement of spaces within the environment, what might be on the walls, floors, inside and outside.

IMPORTANT: The focus is on how they would like the child to **feel** on entering that space, NOT on how or what the children might play with.

Students have 10 minutes to do this.

Then the facilitator chooses 2 volunteers to share their ideas with the whole group.

Reflection

The discussion afterwards will focus on:

- ◆ What are the reasons behind the choices the groups made?
- ◆ Were they age appropriate?

- ◆ What are the differences and the similarities between the two chosen designed learning environments from the point of view of the way children might respond emotionally?
- ◆ How could you ensure that the environment is inclusive of all the children in the class including family structure, disability, culture etc?

Materials

1. Play environments should offer materials that are specifically put there to encourage and support a wide range of kinds of play, and possibilities for play. The teacher needs to think carefully about how the materials support and stimulate the thinking, social, emotional, and physical development of children (Catron & Allen, 2007).
2. It is also important to think about materials that might be unusual, that might 'provoke' children into playing with them. For example, putting out mirrors, natural objects such as autumn leaves, bowls of coloured water, tins and boxes of different sizes, and so on might surprise and delight the children into wanting to interact with them. For older children apparatus like magnifying glasses, scales, measuring tools, books, microscope, construction materials, would encourage exploration and experimentation. Where possible children should have a computer with internet access in the classroom.
3. Accessibility is very important. Can all the children who need to, easily get to the materials? Can the materials be left out over a period of time if the play is an extended activity?
4. Flexibility might be an issue. Materials that are more open-ended, that can be used for many kinds of play, are the ones teachers are most interested in. So materials such as blocks are more open-ended than a puzzle, because many, many things can be done with blocks, and block play can go in many directions.
5. We want play materials that encourage engagement, that stimulate and challenge thinking. We want materials that are open and flexible and provide children with opportunities to be creative, to facilitate social interactions with other children and teachers, and that encourage deep engagement by the children.
6. Careful thought should be given to how many materials are in the environment at any one time. Not having enough, and enough different kinds of materials limits children's ability to play, and can lead to boredom. On the other hand, having too many materials can discourage children. Too many confuse children, and make it difficult for them to make play choices and to focus deeply. Both too few and too many materials can give rise to behaviour difficulties in the learning space. With the right number of materials available, teachers can spend more time engaging and playing with their children, and less time trying to control behaviour, 'tidying up' and trying to keep good order.
7. Changes in the kinds of materials that are available to children also need to be made. New materials need to be rotated into the learning environment to expand children's learning, or encourage a new direction. Those materials that are no longer engaging or interesting for children need to be rotated out.
8. Last but not least, on a practical level, are the materials able to be easily handled by the children? Are they safe? Are they easily put away, stored and cleaned?

All these issues, which materials, how many of them, regular changing of materials, the introduction of new materials and removal of old materials, should be guided by careful observation and reflection on the part of the teacher. Thus again, the 'assessment' element of the PBA cycle comes into play.

- ◆ How are the children responding to the materials? Are they excited and interested?
- ◆ How do they use the materials? Is their play constructive or not?
- ◆ How play, how do they extend their play with the use of the materials?
- ◆ How are the materials affecting friendships and play partnerships?

All these questions can only be answered if the teacher pays close attention to the children at play.

To consolidate our thinking about how to set up a play-based teaching and learning environment, let us reflect on the principles of play that were outlined in an earlier section. These are:

- ◆ Play is intentional
- ◆ Play demands that children be active
- ◆ Play is fun
- ◆ Children make choices about their play activities
- ◆ Children can lead, direct and control their own play activities.
- ◆ Play is meaningful in that it offers opportunities for children to come to terms with and create meaning about their world
- ◆ Play is communicative.
- ◆ Play is a process.

For a learning environment to be truly and fully set up for play-based teaching and learning, we need to see these principles at work in the environment. The environment is what will bring the children into contact with the kinds of experiences and activities that will promote learning in the way that children learn best, through play.

Activity 7.7: Designing a dream play space (90 minutes)

This activity focuses on the set up of a play-based learning environment in terms of how it facilitates play.

Purpose: To think about an ideal environment for play-based teaching and learning

Facilitation

Students are divided. They are told that they have been given the chance to set up either a Grade R class for 5-year-old children/Grade 1 – 3 class for 7 – 9-year-old learners. They are the designers of the space and can put into it whatever they feel is most appropriate for their context. This is to be a play-based classroom.

They should think about their ideal classroom, the one all teachers dream of, and there are no limits in terms of what they can design.

The facilitator makes the point that 'dreaming' in this very constructive way, is a kind of mental play.

In groups of 3 or 4 people, they are asked to choose an age group and to draw a plan of this dream classroom and clearly mark everything they wish to put in it.

In designing this dream space for play-based teaching and learning, students might find it useful to:

Use the discussions in Sections 4, 5 and 6 as guidelines (principles of play, forms of play etc).

Ask themselves some questions about the physical environment (indoors and outdoors), the emotional environment and the materials, or what they would like to put into their environment. These questions may help:

- ◆ What is in my space(s)?
- ◆ Why is it there? Do I think it will be of interest to the children? Does it suggest to children some types of play that they may like to do in it? Does it invite and promote engagement?
- ◆ Where is the material? Have I placed it in a place, and if so, why?
- ◆ Who has access to it?
- ◆ What kind of play do I want to encourage with this material?
- ◆ What else can I offer children in terms of an invitation to play?

They have 30 minutes to prepare their design.

These designs are all put up on the wall to make an exhibition.

Students and the facilitator then look at the designs.

At each design, the facilitator asks the group who made that design to give reasons for **one choice** they have made in their design.

Reflection

In the whole group, ask each student to write down one thing from any of the designs that s/he thought was a particularly good and well-motivated idea, and why s/he chose it. Invite each student in turn to read this to the whole group. The lecturer will collect them and make a copy for each student in order to form a collective set of good ideas.

Notes to the facilitator

This work can form part of the students' writing portfolio

TEACHING IN A PLAY-BASED APPROACH

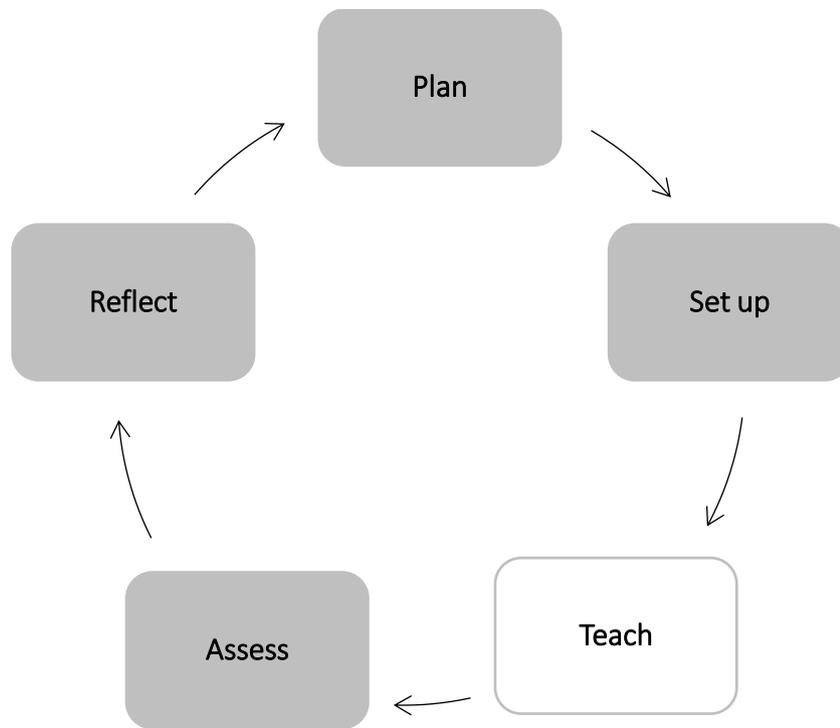


Figure 8: Play-based approach to teaching and learning cycle – Teach

In this section we explore the role of the adult in supporting, scaffolding and extending learning in play activities across the play continuum, and in helping children to engage in the important five types of play introduced in Section 4.

It is important to think of the adult in a play-based learning centre as a facilitator, rather than a teacher, since the word facilitator implies a shared agency, as the Oxford English Dictionary states: “someone who helps a person or organisation do something more easily or find the answer to a problem, by discussing things and suggesting ways of doing things.” This term is more in line with how we see ourselves in relation to the child, for example as an MKO, enabling that child to learn in the way that suits them best.

“Becoming a play facilitator takes practice and courage. Practitioners need to understand the importance of play in young children’s development, to feel empowered to lead sessions that focus on process, and to have concrete examples that model activities and scenarios; rather than recipes, these examples should provide a springboard for them to iterate and innovate. The combined professional judgement, skill and confidence, which this kind of support inspires, hold the key to success in practice.” Kim Foulds, Sesame Workshop as cited in Jensen et al (2019/foreword).

The teacher’s judgement, skill and confidence that underpin good play facilitation practice are not so easily come by. They require a solid understanding of children’s play and development. They require dedication, commitment, and ongoing deep reflection on engagement with children’s play.

It is important that from this point on, students refer to the previous modules, to continually reinforce their understanding of play, in just the same way that children return to the same or similar play to practice, deepen and benefit from. Successful learning, like successful play, as we have seen, is iterative in nature. So where to begin?

Image of the child

Loris Malaguzzi (1993) says that we begin with our image of the child. And so, we reflect on this, not just once, but every day, in every encounter with the child. We make sure that our image of the child as active ‘designers’ or at least co-designers of their learning paths, active students with a right to agency, with an ability to initiate and control their own play activities remains centre stage and does not falter. In order to create successful and beneficial play-based learning experiences for children, we need to teach in such a way that they are as often as possible, deeply and fully engaged in any play activity that we design with and for them.

Our image of the child will be challenged many times, but it needs to be one of the cornerstones of our interactions with children, our planning, our setting up of the environment, and our teaching.

“A good start point is to identify children’s interests through things in their dialogues, actions, and creative expressions. The next step is to ask: How can I help children to build worlds that allow them to play and learn **around those interests?**” (Guzman, 2019).

Using the play continuum

One way to build such worlds is to use the play continuum (See Section 6). Play facilitators can decide where they want to be on the continuum. Are they giving the children space and time for free play? Or are they currently choosing to engage in guided play? Wherever they decide to place themselves, the decision made regarding the continuum comes before the activity. I want to engage in ... form of play because I wish to support ... learning, in this child(ren).

A meta-analysis of 164 studies of discovery based active learning, found that assisted discovery methods (those similar in nature to guided play in which adults support, but children lead) resulted in the best learning outcomes (in domains as varied as: mathematics, computer skills, science, physical/motor, and verbal and social skills) when compared to either free play or direct instruction. Research over the last few decades has repeatedly shown that learning is optimized when adults scaffold an environment or feedback towards a learning goal, but the learning environment encourages fun, child-led exploration and discovery.” (Zosh *et al.*,2018).

Zosh and colleagues indicate that while past research found free play less effective for academic settings than direct instruction, playful learning in the form of guided play with adult support focused on a curriculum aim, may be the best pedagogical approach for learning across domains as varied as STEM and literacy. Children “perform better in guided play than in free play and equal to or better than in direct instruction.” p 2

This does not mean that the only play, or that the play that predominates in an ECD setting should be guided play, far from it. Guided play serves a particular purpose, which is not all-encompassing in children's learning. There needs to be a wide spread of play activities along the play continuum for play to maximise its potential for optimal learning in young children.

Intentionality

The activities teachers will design/co-design with the children, flow from the formation of an intention, rather than from an activity, and not the other way around, for two reasons:

- ◆ There needs to be an **intention** behind what teachers do, a learning goal of some sort, however loosely or tightly that is expressed. We become intentional teachers. "In everything teachers plan and do ...they need to be highly intentional. That is, they need to work with the outcomes for children in mind and consciously seek out every opportunity to help children achieve these outcomes through the learning experiences they plan, the ways they interact with children, and the ways they create and regularly modify the environment." (US Department of Health and Human Services, Head Start Bureau, 2003:21).

This isn't to say that we can't be creative and innovative, and design beautiful and clever activities, but we harness innovation and creativity to an intention.

- ◆ It was stated at the very outset that play is inherently a process, and so the intention needs to be centrally concerned with process, even though at the playful instruction end of the continuum, we are working towards a learning goal.

It is the process through which we move to arrive at that goal that is of prime concern to teachers. And once we are immersed in the process, we need to be open to the idea that the process might change, the direction and flow of play might change, and then we must decide what to do about that.

This means that we must be responsive.

Responsivity

"Responsive adults build on what children know and care about, spark curiosity, and deepen children's understanding of new ideas, skills and content. When children are engaged, they (responsive adults) bring themselves into a learning activity, often by thinking of ways to enrich the experience and take the activity even further." (Jensen *et al.* 2019:19).

This means that facilitating adults try and understand, or 'tune into' how children are as themselves in play moments. Responsive teachers adjust, modify, change their own actions and roles in response to this. They attend to children in a focused way, to what they say, what they are doing, and how the children themselves seem to feel about what they are doing.

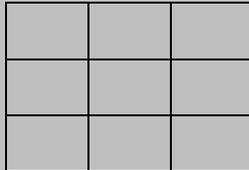
Activity 7.8: Noughts and Crosses/Tic-Tac-Toe (10 minutes)

Purpose: To experience close observation and appropriate responses

Materials: 5 counters for each student (or pair of students) on a 3 x 3 grid.

Facilitation

This is a game that relies heavily on observing what your partner is doing and responding appropriately.



Students play in pairs, or in a group of four students in teams of two players.

Students are either a nought or a cross and take turn to place one counter. The other player tries to block them. The first player (or pair) to get three counters in a vertical, horizontal or diagonal row is the winner.

Reflection

Students reflect on what the game can teach us about close observation and appropriate responses. How might it be used or adapted for an ECD setting? Justify responses.

It is often true that the best laid plans can go wrong, and nowhere is this more observable than in working with young children. The teacher may start out with a certain activity or playful experience based on a learning goal, only to find as that activity progresses, that the children don't respond in a way that was anticipated, or they quickly lose interest. So, the activity starts to drift away from the intention set by the teacher, it starts to lose its central principles of play, and it becomes something neither useful to the adult nor beneficial to the child. Something needs to change.

It is also possible that some time into the activity, the teacher realises that although the activity is serving its purpose, and the children are engaged, and the principles of play are still present, there emerges from the experience a better way to continue. Perhaps the children are nudging the play in a direction which may yield greater possibilities for exploration, a deeper engagement with the intention, a more enjoyable way to go.

In all these scenarios, it is the responsiveness of the teacher that will help him/her to make a necessary shift which may be, to capitalise on a 'teachable moment', to make a beneficial change in what is available to the child, to explore another possibility afforded by the given materials, to change the interaction with the children in the situation. This is how play-based activities can move up and down the play continuum. The constant interplay between the two concepts of intentionality and responsiveness drives the teacher into and through the learning experience of the children.

Scaffolding

A concept related to both intentionality and to responsiveness, and critical to providing the most appropriate support for children's play, is the notion of scaffolding.

Scaffolding is related to the theories of Vygotsky (see Section 4) and to Jerome Bruner's work in the 1960s and 1970s.

Important features of scaffolding are:

- ◆ It is a way of providing **ongoing support** during a playful interaction
- ◆ It is always **related to the intention** of the experience
- ◆ It depends heavily on the **teacher being present in the play moment, observing carefully** and **responding** to the child
- ◆ It **begins where the child is at**, and not where the teacher thinks the child should be.
- ◆ It tries to **activate the child's prior knowledge**.
- ◆ It **follows the child's lead**
- ◆ It **supports rather than interferes or hijacks** what the child is doing
- ◆ It strives always towards the **child's independence or agency** in the situation
- ◆ It retains the **core principles of play** outlined in Section 5
- ◆ It is faded out, or **dismantled gradually** over time
- ◆ It requires **constant assessment** of what is happening in the situation
- ◆ It takes the form of **ongoing improvisation**. Support cannot always be planned; it needs to be responsive on a moment-by-moment basis
- ◆ It can be done by any MKO, and in play this is often a peer, or an older child. Peer learning is a very powerful tool and is often an inherent part of children's play.
- ◆ **Scaffolding can give children time** to practice through their play, by supporting within the child's ZPD and at the child's pace. Remember one of the core principles of play is that it is **iterative**, and this can only happen with time.

The social learning theory of Vygotsky is generally credited with providing theoretical basis for the practice of play facilitation in terms of his notions both Zone of Proximal Development (ZPD) and of the More Knowledgeable Other (MKO). The ZPD is where the scaffolding takes place. Scaffolding is what the MKO does in the situation.

How, why, which questions?

One important scaffolding tool is the art of asking questions.

There are different kinds of questions that apply in scaffolding, each with a different purpose and which function differently in relation to the child.

- ◆ **Closed questions.** These are questions that simply ask for information and can usually be answered with a 'yes' or a 'no', or one or two words.
- ◆ **Open-ended questions.** These are questions that do not have one correct answer. There are many possible answers. Open-ended questions stimulate higher level thinking and encourage problem-solving.
- ◆ There is an 'in between' kind of questioning called '**forced alternative**' questioning. For example, saying to the child 'Is this a cat, or is it a dog?' This kind of questioning focuses the child's attention and offers and models for them alternative ways of replying. This is especially helpful for children who are struggling with language (either a new language or a language difficulty).

Some principles involved here include:

- ◆ Don't ask a question unless it serves a purpose in terms of extending or deepening the children's understanding or involvement in their play activities.
- ◆ Choose your question carefully and phrase it in such a way that it is accessible to the child and makes sense in the context.

Question when?

- ◆ Think about the question in terms of whether it might shift the play in a direction that you want, or that might change the form of play at the time it seems needed. For example, asking a question at the right time may prevent the free play from falling into what might be certain to become boring repetition, and could become co-opted play in order to keep children engaged.
- ◆ When observation and intuition working together tell you that it is the right time.

Activity 7.9: Using questions in scaffolding children's play (30 minutes)

Purpose: To critically examine the use of questions during children's play

Materials: Video clip: <https://www.youtube.com/watch?v=byIL-3W7pAI>

Facilitation

Students watch this video sequence \ video clip which shows a teacher interacting with a small group of children in a play sequence. <https://www.youtube.com/watch?v=byIL-3W7pAI>

This teacher uses questioning constantly with the children to scaffold their learning.

Reflection

Students discuss in groups the following questions:

- ◆ What learning was this teacher trying to scaffold in the children?
- ◆ Did she use the questions at the right time?
- ◆ Pick one question she asked and decide what purpose the question served.

- ◆ Pick another question that you felt was not appropriate in some way. For example, it may have co-opted the play to too great a degree, it was ill-timed, it was intrusive, it seemed pointless.
- ◆ Create your own question in that same moment that you feel would be more appropriate and motivate why.

Bruner (Wood, Bruner & Ross, 1976) also felt that one of the most helpful modes of representation during scaffolding is through language. This means, amongst other things, that the teacher verbalising for the child might be useful for that child. The teacher can verbalise his/her own thought processes; provide a running commentary on what the children are doing; model their inner dialogue, give children time to talk; and providing vocabulary that might be useful to them.

Activity 7.10: Using Language as a scaffolding technique (45 minutes)

Purpose: to explore language to scaffold learning.

Materials: Video clip – <https://www.youtube.com/watch?v=gLXxcspCeK8>

Facilitation

Students watch the following video: <https://www.youtube.com/watch?v=gLXxcspCeK8>

Play the video again, while the students are watching, they are to identify three ways in which language was scaffolded in this video, and to write them down.

Reflection

Plan a language activity for a Grade 3 class building in the scaffolding techniques identified from the video. Students share their ideas with a partner

Last words

Holding a positive, empowering image of the child in your mind, being expressly and specifically intentional in one's approach to the facilitation of play-based learning, being consistently and appropriately responsive, and knowing how to scaffold are core principles of good play-based teaching.

We can add to this, the other attributes of a teacher that Foulds (cited by Jensen *et al*, 2019) contends support children's play in positive constructive ways:

Courage

It was mentioned at the beginning of this module that play-based facilitation takes courage.

Courage means to be open-minded enough to step outside the realm of what is familiar and known, into something less familiar, more challenging and unknown.

Having trust in the child and in ourselves, being responsive to ongoing learning needs, and allowing new possibilities does take courage, and should be cultivated in any play-based learning teacher.

If we let them, children will take us there.

Curiosity

A facilitator needs to be deeply curious in many ways.

- ◆ How is this child thinking and learning?
- ◆ How did this child get to this point in his/her learning?
- ◆ What can I explore in terms of my responses?
- ◆ What will happen if I scaffold in a way?

A path of curiosity can support courage, can strengthen a relationship with a child and can lead to innovative, creative thinking, planning and implementation.

Creativity

Creativity is a term that is often misunderstood and misused, but it lies at the heart of any teaching and learning endeavour. It underpins the whole process outlined in the PBA cycle we have looked at because it helps us to ask and answer questions such as:

- ◆ How can I respond, plan, structure, support what I see in the best possible way for this child?
- ◆ How can what I decide to do incorporate all the principles of play in all my planned activities?

The qualities of courage, curiosity and creativity in a facilitator will help to strengthen and enrich what support s/he offers in all learning and teaching in an ECD setting/Foundation Phase classroom. They are cornerstones for the most fundamental thing that good play facilitators do, which is develop and nurture positive, caring and supportive relationships with the children in their care.

Forming relationships

The central relationship that a teacher has is of course with the children, but teachers also have a relationship with their environment, with the activities they plan and implement, and with the broader community in which both they and the children live.

Activity 7.11: What is the place of creativity, curiosity, courage and relationships in the PBA (20 minutes)

Purpose: to consider attributes of an intentional, responsive teacher

Materials: PBA cycle diagram one for each student

Facilitation

Each student receives a copy of the PBA cycle diagram and adds into it the following in whichever way they choose:

- ◆ Creativity
- ◆ Curiosity
- Courage
- Relationships

Reflection

One or two students are called upon to display their new diagram to the whole group, outlining reasons for their choices, focusing on the relationship of these qualities to specific aspects of the cycle. For example, how does curiosity relate to planning?

Practice

Last, but not less important is practice. Reading, listening to lectures, making notes will help to support student's understanding of play and play-based learning, but practice is what will embed it in a teacher's mindset for teaching, and in what s/he does every day in the early learning setting/ classroom or with a child in a home setting.

Activity 7.12: Practising scaffolding (30 minutes)

Purpose: to practise scaffolding with different age children

Facilitation

Students are given the following assignment:

Spend 30 minutes with children on three separate occasions

- ◆ A 2-year-old baby playing with toys of his/her choice. Make sure this is a free play situation
- ◆ A 4-year-old child outside. Co-opt this play in some way to extend the child's play.
- ◆ A 7-year-old child playing a board/pencil and paper game unknown to the child. Make this a guided play situation.

Make notes during and after each interaction in terms of:

- ◆ How you scaffolded the activity (not in the free play situation)
- ◆ Write down verbatim three things the child said that you regard of significance to that play.
- ◆ State why they are significant.
- ◆ Write down verbatim three things YOU said that you think influenced the child's play.
- ◆ How did they influence the child?
- ◆ Write down one thing you did in each situation that you think impacted on the child's play in a positive way.

Reflection

Students bring their notes to their next class for discussion in small groups.

Notes to the facilitator

The following videos will give students ideas for the implementation of a play-based approach.

<https://www.youtube.com/watch?v=2Hw0DbxOmJQ>

<https://www.youtube.com/watch?v=wbWRWeVe1XE>

Work on these videos could form part of the students' writing portfolio:

'Choose to watch one of these videos on play-based teaching and learning. Make notes on what for you are the important points made about what teachers do in classrooms, in your chosen video.'

PLAY-BASED ASSESSMENT

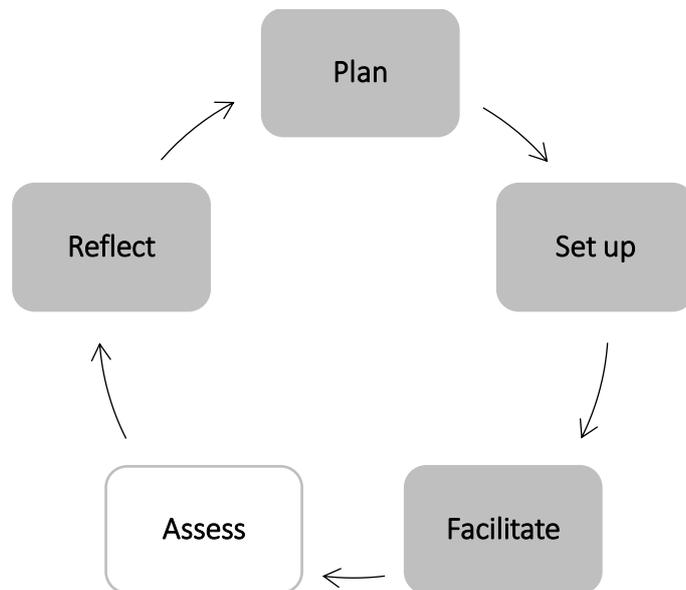


Figure 9: Play-based approach to teaching and learning cycle – Assess

If we want to be the kinds of play facilitators outlined in the section of play-based teaching , several important questions arise.

If we are to be intentional, fully responsive, creative play facilitators, how are we going to know:

- ◆ What might be an appropriate learning goal for these child/children?
- ◆ Where might be a good place to begin offering free play, or intervening in play, or designing a suitable play activity for instruction?
- ◆ Where to place ourselves on the play continuum to support these child/children?
- ◆ What does this child, or these children, already know?
- ◆ What they don't know, but might be very close to knowing? Where is the ZPD for these child/children?
- ◆ When is it appropriate to step back in a play activity?
- ◆ That we have planned appropriately?
- ◆ That we are in tune with the children's needs currently?
- ◆ If we are not attuned to these needs?

The answer lies in **assessment**.

Assessment involves **gathering** and **analysing** information to help understand the knowledge, skills and attitudes of children. This informs planning, reporting to parents and can highlights individual children's interests, strengths and gaps.

Traditional formal standardised tests, as well as informal tests designed by teachers and given to children aim to 'measure' a child's performance in various ways and gather a certain kind of information.

Our concern is with play-based learning, and so assessment within this framework, will be largely based on observing play, using play in various ways as the primary means of gathering information.

Gathering

In gathering, we are bringing together instances of the child’s responses to a situation, behaviour, interactions, ways of playing, social interactions, speaking and so on, from a range of different play experiences.

In play-based assessment, evidence of learning and development is gathered during daily programme activities as children play and learn.

Activity 7.13: Gathering information in a PBA (20 minutes)

Purpose: Exploring the many ways in which useful information can be gained about children’s development.

Facilitation

“Educators use a variety of strategies to collect, document, organise, synthesise and interpret the information that they gather to assess children’s learning. They search for appropriate ways to collect rich and meaningful information that depicts children’s learning in context, describes their progress and identifies their strengths, skills and understandings.” Cheeseman (2012:2)

Working in small groups, students add to the table below, 3 other ways to gather information about and through children’s play. Name them and give examples of what they reveal to you. An example is offered.

Means of gathering information	What this gives me	Why is this information important? How will it help me?
Speaking to families	Information about how children play at home, who they play with, for how long, preferred play activities, special toys, do adults play with the child? Etc.	It adds to my picture of this child outside the educational setting which might have significant bearing on how I work with this child in terms of play at school.

Reflection

Students are to (i) prioritise these ways of gathering information and (ii) discuss amongst themselves the reasons for this order of priority

Notes to the facilitator

It should become clear during the discussion that ALL means of gathering information are equally important and fit together in building a meaningful picture of a given child. Other ways of gathering information about play include: observing and taking ongoing notes and jotting down information as the play activity progresses; directing a play-based activity and asking the child to complete particular play “tasks”; taking photos and videos; collecting and keeping children’s work; using checklists and rubrics to focus what you are observing and organise what you have gathered.

Observation

One very effective way of gathering information is through **observation**.

Careful, sensitive observation of play which is well recorded allows us an insight into what children do when they are playing, rather than what we think or believe they do. It allows us to establish links between what we see in children’s play behaviours and where, what and who they are playing with, in other words, the context of their play. If rigorous enough, especially through video recording, it gives us access to children’s non-verbal behaviour during play, which is often as telling, or even more telling, than what they say. Facial expressions, what is done with a toy, eye contact with others, how closely children observe each other, can be very useful indicators of how children might be thinking and what they might be learning.

We have seen how central the social aspect of play can be, and how much children learn from social interactions and relationships. Observation in a ‘naturalistic’ setting, while children are playing also gives us the opportunity to record social processes involved in children’s play. These social interactions can be with ourselves as teachers (how does the child respond to me and what I do and what we do together?) as well as with peers (how does the child respond to others, and who might they be?) We know how powerful children’s collaborative peer learning can be, and observation can give us a window into this aspect of children’s play, thinking and learning as well.

Observation is about awareness. It means paying attention and being present.

Some features of observation are:

- ◆ Observation needs to be both focused and yet ‘open’. Observing the details of play, for example what the child does with the car, and what the child says about the car and to whom, are important. But so is where the child is playing, who interrupts, how the child might be feeling that day, giving a much broader scope.
- ◆ Observation can be done for different reasons at different times, or the same reason over a series of observations, in order to see what has changed. For example, how a child grows into an understanding of rules in games.
- ◆ Observation can be ‘at a distance’ when the teacher sits quietly watching, listening and taking notes unobtrusively, or it can be ‘in the moment’, while the facilitator is playing with or interacting with the child, having a dual role as observer and facilitator.
- ◆ Observation can be regular and planned, or spontaneous. For example, observing a child during guided play of a nature over a series of play sessions. Or the nature of a child’s

play might suddenly change, and you want to capture the moment in order to understand what triggered the change, and whether the change is a 'step forward' in thinking in some way.

- ◆ Observation can be prolonged over an hour or so, or momentary, picking up on a small, but perhaps significant, moment in an ongoing play activity.
- ◆ Observation can be done at intervals, so that cycles of assimilation and accommodation can be observed, and a path of development traced.
- ◆ Observations across observers is often useful. Corroborating what one observes by comparing notes with another knowledgeable facilitator, can reveal interesting insights.

Activity 7.14: Observation in practice (40 minutes)

Purpose: To practice observing a child during a play activity

Materials: video, pencil and paper

http://www.cde.state.co.us/resultsmatter/RMVideoSeries_PracticingObservation.htm

(Samantha and Sarah building towers and castles)

Facilitation

Part One

Students watch this video.

They make notes on the following:

Imagine the little girl building the tower is in your school.

1. Write down three things that each child does that you feel is significant. Say why they are significant.
2. Write down two things each child says that you think are significant. Say why there are significant.
3. Write down two things that you think are important about the relationship between these two little girls. Say why they are important.
4. Write down one thing that surprised you in the building of the tower, and say why.
5. Did anything that happened in the video challenge any assumptions that you might have had when you started watching? What assumption of yours was challenged?

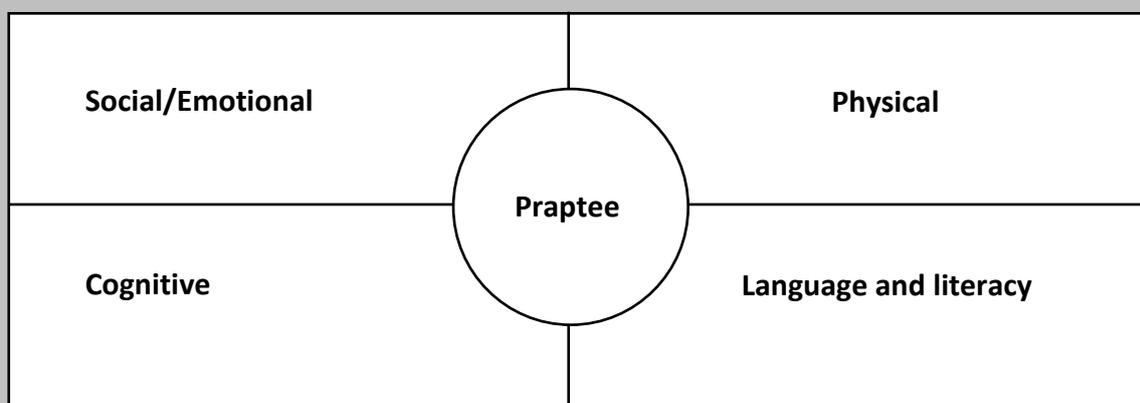
Part Two

Students watch the video again.

They make notes on the following, using the notes taken in Part One

- ◆ What are some of the significant moments in this sequence that you would want to take note of?
- ◆ To which domains of development do these moments relate?

Jot down some ideas you might have about this child's development using the following as a guide.



Analysing

It is not enough to just observe. We need to take what we have found and determine how it relates to what the child is learning. To understand this significance and provide 'evidence' for our ideas/theories about the child's learning, we must work towards building a complete complex picture, an understanding of the child's developmental growth as this child grows and learns.

This means we are trying to get an insight into the meaning of what is observed. It requires reflection, deep thinking, and critical analysis in the service of making sense of the gathered information in the context of the child and his/her learning path.

In a sense, the teacher is looking beneath the surface of what is observed, looking for windows into the child's thinking and learning. Analysis is an important part of observation, and therefore of the assessment process.

Notes to the facilitator

Apart from these observation records, other assessment tools and techniques to be used in play-based assessment are described in the following reading:

New Foundland, Labrador Education and Early Childhood Development (2016) **Full-Day Kindergarten Play-Based Learning: Promoting a Common Understanding**. Canada.

Work on this could form part of the students' writing portfolio:

'Identify one other assessment tool that interests you in this reading. Describe it and say why you chose it.'

Students could be encouraged to try these in their practice teaching and reflect on how it worked- was it helpful, how? What information did it not provide? Suggest ways you could supplement the information.

Using play itself as an assessment tool

Trying to get to an understanding of a child's learning can also be done using play itself. Here the use of the forms of play along the play continuum (Section 6) as a tool may be considered.

Free play can be observed at any time the child/children engage in it, but the context, the materials the child is using, the group s/he may be with and so on can be chosen by the observing facilitator for an assessment purpose.

Co-opted play (wherein the child initiates the context for play and the adult intervenes to direct the play within that context, for example to extend the child's learning) can be used to assess how a child responds when something in the play is shifted for a specific purpose.

A guided play activity can be set up by the teacher and introduced to the child. This may yield information about for example how a child responds to specific kinds of guidance in play.

A teacher can design and set up an activity designed to instruct the child in a skill. This activity can be carefully observed in terms of the child's response to the various elements and steps in the task. This would be an observation with a very tight focus.

In both guided play and playful instruction, the teacher can use pre-determined scaffolding techniques in order to assess how the child/children respond to specific kinds of support. Information gathered of this sort may also help determine what can be offered by way of scaffolding for the child in play activities going forward in order to support the child better and promote a certain kind of learning or development.

Engaging the child in different forms of play along the continuum for the purposes of assessment can therefore be a useful guide.

Activity 7.15: Observation as assessment (30 minutes)

Purpose: To use information gained in observation to extend a play activity

Materials: video clip

http://www.cde.state.co.us/resultsmatter/RMVideoSeries_PracticingObservation.htm

Facilitation

Play the video clip Samantha and Sarah building towers and castles

(Students watch this video again)

Each student is to look back at the notes they have already made regarding this little girl.

Each student is to write down:

- ◆ What further information might you want to know about her learning based on this sequence?
- ◆ Think of a mathematical concept that is perhaps highlighted in this sequence? What question(s) would you ask the child herself to give yourself further information related to this?

- ◆ What change(s) might you make to the materials to assess her understanding further?
- ◆ Identify a point at which you would intervene to change this from free play to guided play in order to get this information.
- ◆ Use the NCF 0 – 4 curriculum outcomes as a guide

Reflection

Students get into pairs and discuss their responses to these questions.

Taking assessment forward

Two overarching reasons for doing an assessment of a child’s play and through play are:

- ◆ To help build a picture of a developing, learning child, and deepen an understanding of the child’s learning
- ◆ To inform decisions going forward.

Assessment has as its goal, to use what understanding and insights are gained through the assessment process, to enrich, deepen and extend children’s learning, which in a play-based approach to teaching and learning, is all about play.

Activity 7.16: Planning a guided play activity (45 minutes)

Purpose: To use information and analysis based on observation to plan a play activity

Materials: Video clip

http://www.cde.state.co.us/resultsmatter/RMVideoSeries_PracticingObservation.htm

Facilitation

Watch this video (Samantha and Sarah building towers and castles) for the fourth time.

Look back at the notes you have already made regarding this little girl.

Plan a guided play activity to take her understanding of the concepts of height, weight and balance and their interplay, forward.

Reflection

Building on the guided play activity you have just designed, plan an extension for older children Grade 1-3

Assessment conceived of in the way it has been presented here is an integral part of teaching and learning.

Good play facilitation and useful, beneficial play experiences for children, require good assessment to drive them.

Reflection is another integral part of the five-step PBA to teaching and learning cycle presented at the beginning of Section 7 and is the last step before the cycle repeats again.

As such, it underpins the whole process of play-based teaching and learning.

REFLECTION IN PLAY-BASED TEACHING AND LEARNING

Reflection can be defined as ‘Serious and careful thought’ (Cambridge online dictionary). If this is true, then reflection is the pivot around which all the aspects of this cycle revolve. Reflection lies at the heart of any teaching and learning process, including, and perhaps especially, play-based teaching and learning. This is because learning emerges from play rather than being ‘taught’ or ‘delivered’, because play-based teaching learning is fully responsive to the child engaged in it, and because learning grows and develops organically out of the processes involved in play.

To plan, set up, teach and assess within a play-based approach requires serious and careful thought, not at the end of a process, but right the way through it, all the time.

Activity 7.17: Re-visiting the PBA cycle (60 minutes)

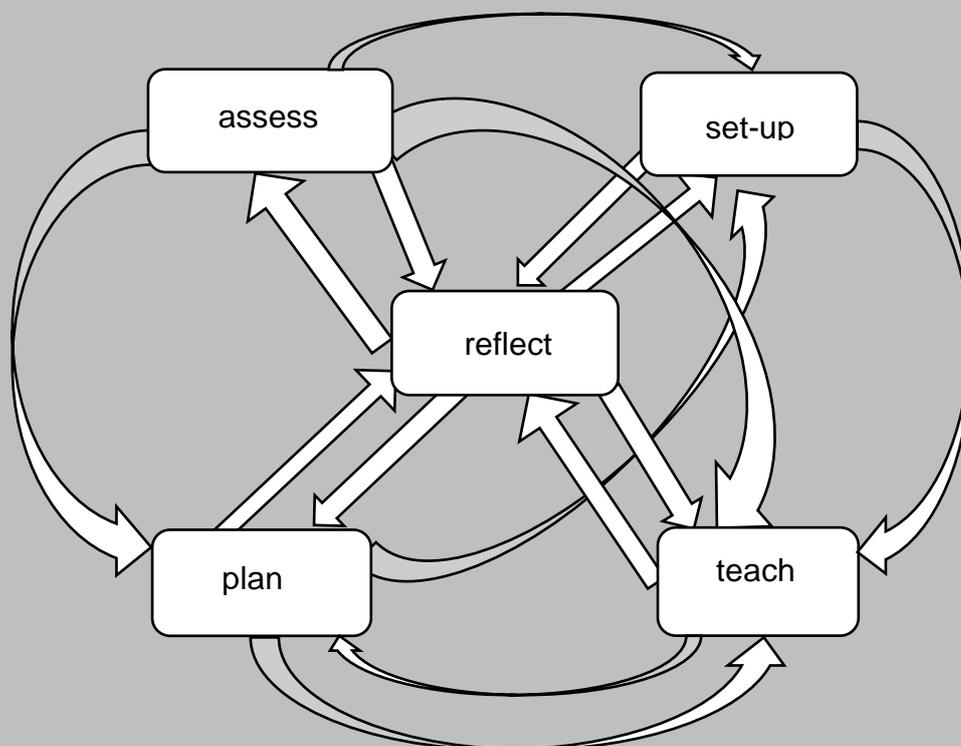
Purpose: to examine role of reflection in the learning and teaching cycle.

Materials: PBA diagram reworked on newsprint

Part One

Students get into small groups.

Look at this diagram . It is a rework of the PBA cycle presented at the beginning of Section 7.



Facilitation

Students write on each of the lines drawn between the elements, what they think the relationship between them is. They are to do this based on the understanding that has emerged from the last 4 sub-sections.

Groups swap sheets and examine the diagram from another group. They make any changes to the statements about relationships they see fit.

Reflection

The sheets are returned to the original group, and any changes made are discussed within the group. Groups can consult one another in terms of why certain changes were made.

Part Two

Students to work in small groups.

There are ways of representing teaching and learning other than this cycle.

Ask students to draw their own visual representation of play-based teaching and learning.

The constraints are:

- ◆ There must be each of the five elements in the cycle present, they may add more if they can be justified.
- ◆ The representation must clearly indicate relationships between the elements.

Each group presents their visual representation to the whole group and justifies the way it has been constructed/designed.

Reflection is involved in each of the elements of the cycle.

There can be no appropriate planning without reflection.

Setting up a facilitative play-based environment is not possible without reflection on what information has been gathered through assessment.

Designing good assessments requires reflection on and during play facilitation. Facilitation of learning through play is not possible without reflection on information gathered through assessment.

In fact, rather than representing these elements as cyclical, which to some degree of course they are, it may be more appropriate for play-based teaching and learning to think of these elements as being in a complex, ever-changing network with one another.

Activity 7.18: Reflecting on Adult Learning (45 minutes)

Purpose: To reflect on our own learning as adults, using Piagetian concepts to do so

Materials: Sheet of paper with table like the one below for students to write in.

Assimilation	Accommodation

Facilitation

Students work individually. They are given a sheet of paper.

Students think about what they remember their understanding of play-based learning to be BEFORE they undertook this training material.

Give the students the following Instructions:

- ◆ Under the heading **Assimilation** jot down three things that you were exposed to in the course that you were able to understand based on your existing schema about play and children's learning when you started this course. In other words what you already knew about children's play and learning.
- ◆ Under the heading **accommodation** jot down three pieces of information that did not fit into your understanding when you started the course. In other words, pieces of information that were new to you, or that challenged your own view and made you rethink your understanding.
- ◆ Still under **accommodation** say how you had to change your thinking to incorporate the new information you received about play-based learning.
- ◆ In a statement at the bottom of the page, say whether you feel you are in cognitive **equilibrium** (you have a satisfactory level of understanding about play-based learning that you think you will be able to work with going forward in your work with young children) **or** whether you feel you are still in a state of cognitive **disequilibrium**.

On the back of this sheet of paper, students are to write either:

- ◆ If you feel that you are in a state of relative EQUILIBRIUM, write down three things that you feel happy to take forward in your work in a play based ECD setting.
OR
- ◆ If you feel that you are in a state of relative DISEQUILIBRIUM, write down three things that you are going to do in order to help yourself towards achieving a greater understanding of play-based learning.

Reflection

Students to share the results of their self-reflection with a partner.

Let's end our exploration of play and play-based teaching and learning as we started, with a game. This can easily be adapted to be played with/by young children. It requires reflection, and a degree of accommodation, since new information is added in each round.

Activity 7.19: Reflection Game (25 minutes)

Purpose: To bring together the concepts of reflection and accommodation in a game

Materials: Pen and paper

Facilitation

Students sit around a table or in a circle. (This can also be done in smaller groups)

Hand out a postcard sized piece of paper and a pen to each student.

Tell the students that they will be guided through a sequence of simple tasks. They are to do only as directed and, especially in the last two steps, NOT to do more than asked.

Instructions

- ◆ Draw a form/shape. Then pass your paper on to the left (or right, stick to one direction)
- ◆ Make something out of the form you got from your neighbour (make it into an object or a person, an animal), then pass your paper on.
- ◆ Draw the context (where it is located) on the paper you got from your neighbour, then pass your paper on
- ◆ Add action or drama to the paper you got. DO NOT WRITE, this will be another step! Pass your paper on.
- ◆ Add text to the paper you get
- ◆ Hand the paper back to the person who first started the drawing.

Reflection

As a group, students reflect on the game, how they felt playing it, what kinds of accommodations they had to make.

Notes to the facilitator

Discuss with the students how they had to adapt to the visual information on the postcards as they received it. And how they had to use this information to think about it in order to continue drawing. Link this to the PBA cycle.

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APPENDICES

Appendix 1: Literature review

Play and Pedagogy: a brief review of the literature

Play in early childhood learning: historical and theoretical roots

Playful behaviours are typical of young animals as well as across a wide variety of human societies. Play is generally categorised into physical play, play with objects, symbolic play, pretend play and games with rules. How much the different types of play are emphasised and supported varies between cultures reflecting different values and beliefs regarding childhood and play, which relate to different social and economic contexts (Whitebread, 2012).¹

Recognition of the importance of play in early childhood development is not new. Play was promoted by the forerunners of the preschools of today. Froebel's Kindergarten in Germany was the starting point, followed by Elizabeth Peabody in the United States of America, Maria Montessori in Italy, Margaret McMillan and Susan Isaacs in England among others. These early education pioneers promoted hands-on, enjoyable, self-directed learning for young children, and saw the teacher's role as creating an environment in which this could take place.

Western theories of development have also promoted play. Jean Piaget's (1952)² constructivist orientation profoundly influenced nursery education for much of the last century. His view was that children actively construct knowledge by interacting with the environment, peers and resources. This approach emphasises the role of the child in initiating experiences and practising new skills. Psychodynamic theorists such as Freud, Erikson and Bowlby also saw play as important for young children but for them it was about providing avenues for the safe release of negative emotions and stresses – especially in the home corner. Their focus too was on free play.

More recently, the rise to prominence of socio-cultural developmental theorists, of whom Lev Vygotsky (1978)³ is most prominent, has changed our understanding of play to emphasise the social and cultural context in which it occurs. While play and in particular the role of imagination is critical for developing self-regulation and language and other forms of symbolic representation, the socio-cultural theorists hold that children develop thinking by interacting with more experienced others - older children, peers and adults who scaffold their learning and so help them learn about the world. This requires a more pro-active role for teachers and socio-cultural theorists attach greater significance to teacher-directed interactions than constructivists.

¹ Whitebread, D. (2012). The importance of play. A report on the value of children's play with a series of policy recommendations. Written for Toy Industries of Europe (TIE). Belgium.

² Piaget, J. (1952). Play, dreams and imagination in childhood. London: Routledge

³ Vygotsky L.S. (1978). Mind in society: the development of higher psychological processes. Cambridge, MA: Harvard University Press

Some challenges for previously held understandings of play and pedagogy in the early years identified by Dockett (2011)⁴ include

- ◆ changing understandings of play which emphasise the social and cultural contexts in which it occurs
- ◆ recognising that children learn in diverse ways and that play may not be the preferred strategy of all children
- ◆ demands for an earlier start to academic education especially for children who may be marginalised, failing in school
- ◆ the role of individual teachers, beliefs and practices and how these impact on play in ECE
- ◆ the changing nature and experiences of play as children engage with popular cultures and a range of technologies (pp 34–35)

Efficacy evidence

The traditional preschool focus on free play has increasingly given way to a focus on the role of play as a vehicle for teaching, as well as learning. There is broad agreement that educationally effective programmes require a holistic curriculum, active child play with concrete materials, sensitive, mediated caregiver/child interaction and engagement with peers including adult led group activities as well as child-initiated activities (Montie, Xiang & Schweinhart, 2006; Sylva *et al*, 2007).⁵

Evidence from studies of the outcomes of Pre-K programmes in the United States suggests that when promoting school readiness, curricula focused on specific school readiness skills are more successful than a more general whole child curriculum which includes, but does not target early maths and literacy skills.⁶ A balanced approach including whole and small group instruction as well as free choice time was found to be most effective (Jenkins & Duncan, 2017)⁷. Jenkins and Duncan warn that a focus on specific skill domains should not be conflated with highly teacher-controlled, direct instruction methods, such as large group worksheet-based academic activities, that have been linked with stress and reduced motivation in preschool children (Elkind, 1986; Stipek *et al*, 1995).⁸

⁴ Dockett, S. (2011). The challenge of play for early childhood educators. In Sue Rogers (ed) *Rethinking play and pedagogy in early childhood education. Concepts, contexts and cultures*. Pages 32 – 47. Oxford and New York: Routledge.

⁵ Montie, J. E., Xiang, Z., & Schweinhart, L. J. (2006). Preschool experience in 10 countries: Cognitive and language performance at age 7. *Early Childhood Research Quarterly*, 21,313–331.

Sylva, K., Taggart, B., Siraj-Blatchford, I., Totsika, V., Ereky-Steven, K., Gilden, R., et al. (2007). Curricular quality and day-to-day learning activities in pre-school. *International Journal of Early Years Education*, 15(1), 49–65. <http://dx.doi.org/10.1080/09669760601106968>

⁶ Phillips, D., Lipsey, M., Dodge, K., Haskings R., Bassok, D. et al. (2017). *Puzzling it out: The current state of scientific knowledge on pre-kindergarten effects: A consensus statement*. Washington DC: Brookings Institute.

⁷ Jenkins, J. M. & Duncan, G.R. (2017). Do pre-kindergarten curricula matter? The current state of scientific knowledge on pre-kindergarten effects. Washington DC: Brookings Institute p 37 – 44.

⁸ Stipek, D., Feiler, R., Daniels, D. & Milburn, S. (1995). Effects of different instructional approaches on young childrens achievement and motivation, *Child Development* 66, 1, 209-223. Cited in Jenkins & Duncan (2017)

Elkind, D. (1986). Formal education and early childhood education: An essential difference, *The Phi Delta Kappan* 67, no. 9 (1986):631-636. Cited in Jenkins & Duncan (2017)

Jenkins and Duncan conclude that

Far from the “drill and kill” methods justifiably admonished by child development experts, successful evidence-based, skill-focused curricula embed learning in playful preschool activities, including story-book reading, games, art, and discovery activities that are conducted in both small and large group contexts and grounded in a sound developmental framework. (p 39)

The Center on the Developing Child (2016)⁹ also recently reviewed evidence of what works to promote early childhood development. In relation to learning they conclude similarly that

The most successful (programmes) are guided by curricula that provide age appropriate, engaging activities focused explicitly on identified outcomes. Curricula that do not target specific outcomes are less likely to have significant impact on anything than those that are designed and implemented with clearly articulated goals in mind. Different capabilities (e.g. cognitive and social skills) and areas of achievement (e.g. reading and math) require different kinds of scaffolding at different ages, so effective learning activities are cumulative and sequenced to align with children’s developmental stages (Center of the Developing Child; 2016, p 29).

The implications of the evidence for the role of the teacher in delivering a play-based pedagogy are for careful planning targeted to individual children’s developmental stages and provision of a range of different fun and meaningful opportunities to support learning.

How policy has responded to child development perspectives on play

International commitments regarding play¹⁰

The Convention on the Rights of the Child which underpins South African Government policies for children provides that

State Parties recognise the right of the child to rest and leisure, to engage in play and recreational activities appropriate to the age of the child and to participate freely in cultural life and the arts. (United Nations, 1989, Article 31).

Play is defined in General comment No 17 (United Nations, 2013, Paragraph 14c) as

“any behaviour, activity or process initiated, controlled and structured by children themselves; it takes place whenever and wherever opportunities arise. Caregivers may contribute to the creation of environments in which play takes place, but play itself is non-compulsory, driven by intrinsic motivation and undertaken for its own sake rather than to an end”.

The United Nations recognises play as a fundamental and vital dimension of the pleasure of childhood, as well as an essential component of physical, social, cognitive, emotional and spiritual development.

⁹ Center on the Developing Child at Harvard University (2016). From best practices to breakthrough impacts: A science-based approach to building a more promising future for young children and families. Retrieved from www.developingchild.harvard.edu.

¹⁰ Kj rholt, Anne-Trine. (2019). Early childhood and children’s rights: A critical perspective. In A.-T. Kj rholt, H. Penn (eds.), *Early Childhood and Development Work*, Palgrave Studies on Children and Development, Palgrave. pp 17 – 38

Consistent with this definition and emphasis on a developmental perspective on free play and peer culture the general comment notes that usually where investment is made in play, it relates to structured and organized activities, but that the need to create time and space for children to engage in spontaneous play, recreation and creativity, and to promote societal attitudes that support and encourage such activity is equally important (Kjørholt, 2019).

South African policy relating to play

The National Integrated ECD Policy (Republic of South Africa, 2015) which outlines government's commitments to early childhood development states that the provision of early learning and stimulation requires "Providing community and centre-based organised play-based early learning that complements the parent's role... (p 27)." In respect of play the policy indicates that while play is a right in and of itself, play is important in promoting children's early learning and skills development and identifies some of the challenges to promoting play as being the

- ◆ lack of knowledge of the importance of play in early childhood,
- ◆ lack of implementation of play-based learning in early learning and development programmes, and
- ◆ a lack of opportunities to play and interact in a child-centred, secure, supportive and stress-free environment.

The Department of Basic Education has recognised the importance of a play-based pedagogy for early childhood care and education and put in place initiatives such as Play-SA to support it. Education Minister Mtoshekga explained that "the foundations that we lay in early learning and the foundation phase through play, will have an impact on the schooling careers of children up to matric and beyond. Play is learning in the early years..." (Newsroom/Media Releases: Learning through playing: launch of online training for Early Childhood Development and the Foundation Phase, 09 March 2017). This was reiterated in the Minister's keynote address delivered at the release of 2018 National Senior Certificate (NSC) examination results, held at Vodacom Dome, Noordwyk, Midrand on 03 January 2019.

However, in curriculum and teacher training policy and guidelines play is largely associated with younger children. It is strongly promoted in the National Curriculum Framework for children from Birth to Four (Department of Basic Education, 2015). The Policy on Minimum Requirements for Programmes leading to Qualifications in Higher Education for Early Childhood Development Educators (Department of Higher Education and Training, 2017),¹¹ which puts in place a set of guidelines for programmes leading to qualifications for ECD educators who are delivering or assisting in delivering ECD programmes, includes specific reference to play and notes

"The use of play as pedagogical mechanism to stimulate early learning and development is particularly important in ECD contexts and the National Curriculum Framework is rooted in play-based learning for ECD"(footnote 2, p 18).

¹¹ Department of Higher Education and Training. (2017). The policy on minimum requirements for programmes leading to qualifications in higher education for early childhood development educators. Pretoria: Author

The Policy on the Minimum Requirements for Teacher Education Qualifications (Department of Higher Education and Training, 2015)¹² explains that

“Grade R prepares young children for formal learning .The focus of this grade is on learning through play, developing physical coordination as well as developing spoken language competence and fundamental ideas that will form a basis for the future development of number sense and literacy” (pp 25 – 26).

No reference is made to play-based pedagogy for Grades 1 to 3. Nor do the Curriculum Assessment Policy Standards (CAPS) refer explicitly to play except in relation to Grade R mathematics.

Further, even for younger children the play-focus in ECD related qualifications is seldom explicit leaving trainers and lecturers to interpret play as they see fit.

The Programme for Inclusive Early Childhood Care and Education (PIECCE)¹³ which is developing a standardised programme framework and set of support materials for ECCE qualifications in the Higher Education Sector has provided a Play Framework to guide development of support materials for qualifications for early childhood education¹⁴ and so address this gap. PIECCE focuses on qualifications for those working with children 0 – 4 years.

What is play?

While play is universally recognised as a feature of young children’s lives, it has not been easy to define and is usually referred to in terms of generally agreed characteristics. These include that it is enjoyable, intrinsically motivated, actively engaging and valued as a process rather than an outcome (Brooker & Woodhead, 2013)¹⁵. Learning through play experiences are said to be characteristically joyful, meaningful, actively engaging, iterative and socially interactive (Zosh, Hopkins, Jensen *et al.* 2017)¹⁶.

Neuroscience helps us understand how playful experiences enhance learning. Lui and colleagues (2017)¹⁷ examined the relation between these key characteristics of playful learning experiences and the interconnected brain processes that support children’s capacity to learn. They summarise studies and find that a positive emotional state (joy) enables many higher cognitive functions such as enhanced attention, working memory, mental shifting and improved stress regulation that are useful for learning. Active engagement is related to executive functioning skills such as inhibitory control. Sustained

¹² Department of Higher Education and Training. (2015). Revised Policy on the Minimum requirements for teacher education qualifications. Pretoria: Author

¹³ The PIECCE collaboration includes UNISA, SAIDE, the Centre for Social Development at Rhodes University, BRIDGE and HEIs, NGOs and TVET Colleges involved in ECCE training for Birth to Four.

¹⁴ Ebrahim, H., Excell, L., Martin, C., Shaik, N., Sotuku, N., Hannaway, D., Taylor, B. & Bipath, K. (2017). *Play framework for the development of support materials for qualifications for early childhood education*. Pretoria: PIECCE Project. (Version 1)

¹⁵ Brooker, L. & Woodhead, M. (2009). The right to play. *Early Childhood in Focus* 9. Milton Keynes: The Open University.

¹⁶ Zosh, J. M., Hopkins, E. J., Jensen, H., Liu, C., Neale, D., Hirsh-Pasek, K., Solis, S. L., & Whitebread, D. (2017). *Learning through play: a review of the evidence (white paper)*. Denmark: The LEGO Foundation.

¹⁷ Liu, C., Solis, S.L., Jensen, H., Hopkins, E., Neal, D., Zosh, J., Hirsh-Pasek, K. & Whitebread, D. (2017). *Neuroscience and learning through play: a review of the evidence (research summary)*. Denmark: The Lego Foundation.

engagement in an activity requires staying selectively focused on the situation. Repetition requires perseverance and some research suggests that this is correlated with improvements in working memory. The role of social interaction in learning is well established either through positive caregiver interactions from early infancy, or through peers in later childhood, which help children develop language, cooperation and social learning, and practise self- regulation.

Types of play

Developmental psychologists commonly distinguish five types of play

- ◆ physical play
- ◆ play with objects
- ◆ symbolic play
- ◆ pretend play and
- ◆ games with rules

Each of these takes different forms at the different stages of development and is a vehicle for learning. **Physical play** starts early and from the second year of life children are engaged in exercise play and rough and tumble. **Play with objects** begins when infants can grasp objects and investigates them by mouthing, dropping, batting, shaking. As they mature this evolves into constructing and making things. **Symbolic play** starts when the infant can make sounds and evolves into different uses of language including enjoyment of rhyming, joking. Drawing and music are also forming of symbolic play. Children engage in **pretend play** from about a year and this evolves into elaborate games involving others as they get older. **Games with rules** involve physical games but also number and language games. While the categorisation is useful, more than one form of play is often present in any activity.

Whitebread and colleagues (2017)¹⁸ recently reviewed the evidence for the role of play in children's development, noting that several studies showed that children perform at significantly higher levels in playful rather than non-playful situations. Their review found evidence of health and exercise benefits of physical play and some evidence for the association of physical play with academic progress, cognitive self- regulation and social competence. Object play links to gains in language, maths and spatial skills. There is good evidence that language play enhances development of language in many ways and that this links to other skills such as social skills, self- regulation and academic achievement. While there are limited study findings on pretend play, despite its prominence in socio-cultural theories of the significance of play, there was evidence that it may impact on social development,¹⁹ is one way of developing reasoning skills and links to executive functioning and self- regulation.²⁰ Games with rules, especially number and linear number sequence,

¹⁸ Whitebread, D., Neale, D., Jensen, H., Liu, C., Solis, S.L., Hopkins, E., Hirsh-Pasek, K. & Zosh, J. M. (2017). *The role of play in children's development: a review of the evidence(research summary)*. Denmark: the Lego Foundation.

¹⁹ E.g Fung, W.K. & Cheng, R.W. Y. (2017). Effect of school pretend play on pre-schoolers' social competence in peer interactions: Gender as a mediator. *Early Childhood Education Journal*, 45 (1) 35 – 42. Cited in Whitebread et al. (2017)

²⁰ E.g. White, R.E. & Carlson, D. M. (2016). What would Batman do? Self-distancing improves executive function in young children. *Developmental Science*, 19 (3) 419-426. Citations in Whitebread et al. (2017)

lead to improvements in mathematics/numeracy ability. Physical games with rules have been shown to help children adapt to formal schooling.

Play in different cultural settings

As Dockett (2011) reminds us it cannot be assumed that all children engage with play in similar ways and the social and cultural relevance of play needs to be acknowledged. Most play studies and the prevailing play and pedagogy discourse is Western and discourse of Western early childhood:

“may mask the fact that the close association between play and pedagogy taken for granted in English speaking and European heritage society is an alien idea for many other societies.” (In particular the)... notion that freely chosen play will promote academic achievement can seem nonsensical” (Marfo & Biersteker, 2011).²¹

While play is often referred to as children’s work in English speaking and European heritage cultures, in cultures where helping with family work has greater significance play takes a different form. Play tends to take place either in imitation of work, Lancy (2012)²² refers to this as the play stage of the chore curriculum, or children bring a playful element to their chores. Who children play with is also culturally determined. In traditional societies in Africa for example, children are expected to play with other children and to receive any guidance they need from older and/or more expert playmates (Ngaisake & Swadener, 2019; Dawes & Biersteker, 2011; Swart *et al*, 1996).²³

How play is viewed across cultures affects the implementation of a play-based pedagogy. For example, in traditional African society the notion of an adult playing face to face with a young child is often seen as incongruous (Marfo & Biersteker, 2011). Cheng (2011)²⁴ points out that in Chinese culture teachers are expected to be stern and strict and allowing play and teachers to take a non-directive role would be regarded as a form of negligence by much of the community including teachers themselves. There have been questions about the utility of privileging play-based over other approaches to education for developing societies. Parental beliefs about experiential learning through play, and traditional theories (e.g. Vygotsky and Piaget’s socio cultural and constructivist principles which talk to learning through play) are at odds with more academic curricula often found in more developing

²¹ Marfo, K. & Biersteker, L. (2011) Exploring culture, play and early childhood education in African contexts. In S. Rogers (ed) *Exploring play and pedagogy. Concepts, contexts and cultures* pp 73 – 85. Oxford and New York: Routledge.

²² Lancy, David F. (2012). The chore curriculum. *Sociology, Social Work and Anthropology Faculty Publications. Paper 574*. https://digitalcommons.usu.edu/sswa_facpubs/574

²³ Ng’asike, J. & Swadener, B. (2019). Promoting indigenous epistemologies in early childhood development policy and practice in pastoralist communities in Kenya. In A.-T. Kjørholt, H. Penn (eds.), *Early Childhood and Development Work*, Palgrave Studies on Children and Development, pp 113 – 132 Palgrave/Macmillan.

Dawes, A. & Biersteker, L. (2011). Early Childhood Development. In Bame Nsamenang & Therese M.S. Tchombe (Eds.) *Africa’s educational theories and practices: A generative teacher education textbook*. Yaonde, Cameroon: Presses universitaires d’Afrique.

Swart, T., Berman, L., Mahahlela, M., Mlonzi, L., Phakati, L. & Sixako, L. (1996). Mothers’ ideas of model offspring inform training. *Recovery*, September, 22 – 26.

²⁴ Cheng Pui-wah, D. (2011). Learning through play in Hong Kong. Policy or practice? In S. Rogers (ed) *Exploring play and pedagogy. Concepts, contexts and cultures* pp100 - 111. Oxford and New York: Routledge.

countries.²⁵ Pramling-Samuelsson and Fler (2009)²⁶ analysing play activity in early childhood education across countries note a number of different emphases for example, in Sweden and Japan free expression of feelings and thoughts and for socialisation was valued, while in China, where academic learning is highly valued, play was viewed as an instructional technique.

These prevailing values are mirrored in teacher attitudes. For example, studies of play-based pedagogy in Grade R and Foundation Phase classrooms reveal different interpretations of a play-based approach (Wits School of Education, 2009; Aronstrom & Braund, 2015)²⁷ and similar findings have been seen in India (Gupta, 2011)²⁸, Hong Kong (Cheng, 2011) and China (Wang & Lam, 2017)²⁹.

Play-based pedagogy: a continuum of strategies

In the light of current evidence of what is required for effective early learning, especially the importance of interactions between children and teachers to support learning, and recognition of cultural variations in play there have been attempts to understand what a play-based curriculum should entail. This has led to a shift from dichotomising free play and teacher structured play, to conceptualising play as existing on a continuum, defined by the relative activity and choice and autonomy of children and teachers. Seeing play pedagogy as a continuum recognises that even when play is free, with children taking the initiative as to what and how to play, the environment set up, materials and people to play with provide a certain structure. At the other extreme is more structured or guided play in which the teacher provides more input. Zosh and colleagues (2017)³⁰ use the umbrella term of playful learning to cover free or child-led play, guided play in which adults scaffold child-led play as well as games where adults design, set rules and scaffold the play with a learning objective. Edwards and Cutter-Mackenzie (2013)³¹ also propose a continuum which distinguishes pedagogical play from free play or child-initiated play. Pedagogical play includes open-ended play in which teachers provide materials for children to explore, modelled play in

²⁵ Roopnarine, J., Johnson, J., Quinn, S., Patte, M. (2018) *International perspectives on early childhood education* New York: Routledge.

²⁶ Pramling-Samuelsson, I. & Fler, M. (2009). Commonalities and distinctions across countries. In I. Pramling-Samuelsson and M. Fler (Eds). *Play and learning in early childhood. international perspectives*, pp 173 – 190. New York: Springer Science & Business Media.

²⁷ Wits School of Education. (2009). *Implementation of the national curriculum statement in the foundation phase*. Report submitted by Wits School of Education, University of the Witwatersrand to Directorate: Curriculum Development, General Education and Training, Gauteng Department of Education. Johannesburg: Wits School of Education.

Aronstam, S. & Braund, M. (2015). Play in Grade R classrooms: Diverse teacher perceptions and practices', *South African Journal of Childhood Education* 5(3), <http://dx.doi.org/10.4102/sajce.v5i3.242>

²⁸ Gupta, A. (2011). Play and pedagogy framed within India's historical, socio-cultural, pedagogical and post colonial context. In S. Rogers (ed) *Exploring play and pedagogy. Concepts, contexts and cultures*, pp 86 -99. Oxford and New York: Routledge.

²⁹ Wang, Z. & Lam, C. (2017). An exploratory case study of an American-style, play-based curriculum in China. *Journal of Research in Childhood Education*, 31:1, 28 – 39.

³⁰Zosh, J. M.; Hirsh-Pasek, J. , Hopkins, E. J., Jensen, H., Liu,C., Neale, C. , Solis, L. & Whitebread, D. (2018). Accessing the inaccessible: Redefining play as a spectrum. *Frontiers in Psychology*, 9, Article 1124.

³¹ Edwards, S. & Cutter Mackenzie, A. (2013). Pedagogical play types: what do they suggest for learning about sustainability in early childhood education? *International Journal of Early Childhood*, 45, 327 – 346. Doi 10.1007/s13158-013-0082-5

which they demonstrate how to explore materials, but children may choose whether to follow, through to purposely framed play where children must follow teacher demonstration. For Zosh and colleagues 'direct instruction', and similarly Edwards and Cutter-Mackenzie's 'work' which is highly structured, is not seen as play.

Cutter Mackenzie and Edwards' (2013)³² work in the context of environmental education documents how rather than valuing one type of play over another, teachers in their study saw different types of play as offering a range of opportunities for supporting teaching and learning. They conclude that the combined use of the three play types (open-ended, teacher/child interaction and modelled) provide multiple opportunities for connecting content and experience.

Implementing a play-based pedagogy: pointers from research

Given the weight of evidence in support of a play-based pedagogy, we now take a closer look at what is necessary to realise this. If play is a vehicle for teaching as well as learning what are the implications for designing play environments and for providing the necessary teaching strategies and techniques? Research on play-based learning for early childhood education and most particularly in the early grades of schooling has identified several common pitfalls as well as guidelines for effective practice.

The Whitebread (2012)³³ study notes a range of challenges for play. Play is often ineffectively supported by inadequately trained staff; pressure to cover the prescribed curriculum limits play; and modern life provides increasingly limited opportunities for the free play and association with peers that were common to parents and grandparents. Also, important to support play is the availability of materials and that are open and flexible and provide children with opportunities for creativity, social interactions with peers and adults and deep engagement.

Teacher understandings and preferences

A number of studies have highlighted teachers' understandings and preferences for different types of play and different roles during play (Dockett, 2011; Aronstrom & Braunde, 2015, Wits School of Education, 2009, Gupta, 2011, Wang & Lam, 2017; Pramling Samuelsson & Fler, 2011).³⁴ As Dockett (2011) notes the specific skill expected to be learned through play (e.g. socialisation vs literacy and numeracy) affects the approach. While this is entirely appropriate, and well-integrated into Cutter Mackenzie and Edwards' model discussed above, teachers in the early grades of schooling tend to resort to more formal academic methods. Within the British Reception classes, Dockett found free play was extremely limited. Challenges included a lack of support from school administration, curriculum and assessment expectations – a curriculum with little space to move, parental expectations, classroom management and a lack of materials, physical space or suitable routines. This was like findings in India (Gupta, 2011) and in South Africa (Aronstrom and Braunde, 2015, Wits School of Education, 2011). In many early childhoods settings play

³² Cutter Mackenzie, A. & Edwards, S. (2013). Toward a model for early childhood environmental education: Foregrounding, developing, and connecting knowledge through play-based learning. *The Journal of Environmental Education*, 44:3, 195-213, DOI:10.1080/00958964.2012.751892

³³ Whitebread, D. (2012) op cit

³⁴ Gupta, A. (2011). Play and pedagogy framed within India's historical, socio-cultural, pedagogical and post colonial context. In S. Rogers (ed) *Rethinking play and pedagogy in early childhood education. Concepts, contexts and cultures*, pp 86 -99. Oxford and New York: Routledge.

takes place alongside other work-like activities often as an alternative or reward for work. Play is not really recognised as an instrument for learning future competencies. As Pyle, DeLuca and Danniels (2017) found in their comprehensive review of 168 studies of play-based pedagogies in kindergarten³⁵ despite theoretical moves towards a more integrated framing of play which sees the different forms of play as complementary to each other

... research focused on developmental learning has highlighted the importance of free play with a lack of teacher intervention, while research focused on academic learning has endorsed the use of teacher-directed play and mutually directed play where the teacher instead occupies an active role. (p 343)

Assessment in play-based learning

Key to implementing effective play-based learning is understanding each child's learning needs and appropriate strategies for meeting these through assessment for learning. Here too there is a tendency for teachers to fall back on more formal methods even if they espouse play-based learning. For example, DeLuca (2018)³⁶ observes that though the move to play-based learning is becoming more established, integrating assessment in this context is challenging for teachers. In a study of 77 kindergarten teachers, Pyle and DeLuca³⁷ to examine their use of assessment during periods of play-based learning, withdrawing children from play to engage in assessment activities was most common. Digital applications and video recordings have been used but analysis and synthesis of data collected was time consuming and required specific skills and training.

Conclusion

In conclusion, in order to effectively integrate a play-based pedagogy into education for children birth to nine years, we would do well to follow Dockett (2011)

To be effective advocates for play early childhood educators need comprehensive and sophisticated understandings of play, grounded in research as well as practice that reflect the relevant social and cultural contexts. Educators also need to grapple with the ambiguities of play and the realisation that play is unlikely to be universally effective or desirable as a path to promotion learning in all contexts for all children. (p 44)

Armed with an adequately nuanced understanding of play and the difference between play and a pedagogy of play, educators will be able to capitalise on its true potential.

³⁵ Pyle, A., de Luca, C. & Danniels, E. (2017). A scoping review of research on play-based pedagogies in kindergarten education. *Review of Education*, 5 (3) pp. 311–351

³⁶ DeLuca, C. (2018). Assessment in play-based learning. In A. Pyle (Ed) *Play-based learning. Early childhood encyclopedia*, pp 29 – 32. Toronto: Ontario Institute for Studies in Education, University of Toronto.

³⁷ Pyle, A. & DeLuca, C. (2013). Assessment in the kindergarten classroom: An empirical study of teachers' assessment approaches. *Early Childhood Education Journal* 41(5):373-380. Cited in DeLuca (2018)

Appendix 2: Annotated bibliographies

④ ⑤ ⑥ National Childhood Network(no date). Aistear learning and developing through play. Ireland: National Childhood Network. (19 pages)
http://www.ncca.biz/Aistear/pdfs/Guidelines_ENG/Play_ENG.pdf

Aistear is the curriculum framework for children from birth to six years in Ireland. This readable booklet explains how to use play to support attainment of different learning outcomes in the framework. These include wellbeing, identity and belonging communicating and exploring and thinking which overlap substantially with the South African National Curriculum Framework Early Learning and Development Areas. The resource guide begins with a description of play and its characteristics, types of play and play at different ages. It gives practical points on the role of the adult, preparing the environment and resources. There are also several examples of play activities linked to different learning areas and provided in different settings (home care, preschool, playgroup or classroom) for different age groups. Suitable for NQF 4, 5 and 6.

④ ⑤ ⑥ New Foundland, Labrador Education and Early Childhood Development (2016) Full –Day Kindergarten Play-Based Learning: Promoting a Common Understanding. Canada. Accessible at
https://www.gov.nl.ca/eecd/files/pdf_fdk_common_understandings_-document_eng_2016.pdf (76 pages)

This guide was designed to help kindergarten (Grade R) teachers understand what play and play based pedagogy is and how to employ play strategies in implementing the kindergarten curriculum. It is readable with illustrations and practical examples. After an introduction to play and its benefits the guide focuses on aspects of play pedagogy, its characteristics, the role of the teacher (planning, assessment, the environment, strategies). There is a focus on inclusion and diversity is discussed. A useful list of video clips and internet references. Recommended for NQF Levels 4, 5 and 6.

⑤ ⑥ Epstein, A.(2007). The intentional teacher: choosing the best strategies for young children’s learning. Washington DC. National Association for the Education of Young Children. (Chapter 1, 8 pages)

This chapter explains the idea of intentional or purposeful teaching which aims at supporting children towards outcomes for development and learning, both academic (literacy and numeracy and more general developmental domains (social emotional, cognitive, creative, physical). It presents the case for a combination of child- and adult-guided learning experiences depending on when each is more likely to be effective for the content and individual children’s needs as assessed by the teacher. Suitable for NQF Levels 5 and 6.

⑤ ⑥ ⑦ Pyle, A. Ed. (2018) Play based learning. Encyclopedia of Early Development. University of Montreal, Canada: Centre of Excellence for Early Child Development.

This is an accessibly written compilation of short papers from leading experts focused on different aspects of play-based learning for children up to five years. Each introduces the subject, summarises recent research, identifies gaps and presents implications for policy and practice. Topics include defining play-based learning, the role of make-believe in developing self-regulation, social and cognitive development and play-based learning, how guided play promotes learning, assessment of play-based learning, play and mathematics, digital play and a final paper provides an overall commentary on the subject. The papers provide a brief but informative summary of each topic with additional references for further study.

Recommended for NQF Levels 5, 6 and 7.

⑤ ⑥ ⑦ Bodrova, E. & Leong, D. (2015). Vygotskian and post-Vygotskian views on children's play. American Journal of Play, 7, 3 371 – 388.

This article discusses the work of Lev Vygotsky and colleagues have influenced play studies. Vygotsky considered the make-believe play of pre-schoolers and kindergartners as the means by which they overcame the impulsivity of toddlers and developed the intentional behaviour needed for higher mental functioning. Play also has a role in creating the zone of proximal development. The article outlines the theory of play developed by Elkonin based on these ideas. His Psychology of Play identifies ways that play facilitates higher mental functioning and explains the stages of play development. The authors also present recent research based on Vygotskian principles including a decline in play maturity and the need for support for play. They caution against turning play into another teacher-directed activity. This is an extremely useful summary of the Vygotskian approach to play which could be a valuable source of ideas for educators. Suitable for NQF 5, 6 and 7.

⑤ ⑥ ⑦ Jensen, H., Pyle, A., Zosh, J. M., Ebrahim, H. B., Scherman, A. Z., Reunamo, J., & Hamre, B. K. (2019). Play facilitation: the science behind the art of engaging young children (white paper). Denmark: The LEGO Foundation.

This white paper draws on research evidence to make the case for a nuanced view of play as a spectrum in which different types of play free, adult guided or more structured games all play a part in the facilitation of learning. Which is used depends on the capacity or skill that is the focus of intentional teaching. For example, instruction draws the learner's attention to critical features and addresses misconceptions while scaffolded discovery gives learners practice in applying new strategies and concepts. Using both allows children to develop the deep understanding needed to apply in new situations. In addition, seven country case studies (including South Africa) shows how play facilitation or academic content learning practices are applied in different early learning settings and some of the contextual and cultural challenges to realising play facilitation in practice even if it is mandated in policy. The paper identifies a few areas for further exploration if play facilitation is to become a sustained and practical reality and how this could be adapted to different cultural contexts. Suitable for NQF Levels 5, 6 and 7.

**⑤ ⑥ ⑦ Wasik, B.A & Jacobi-Vessels, J. L. (2017) Word Play: Scaffolding Language Development Through Child-Directed Play. *Early Childhood Education Journal* 45:769–776
DOI 10.1007/s10643-016-0827-5**

This article discusses the importance of adults' scaffolding of children's language and especially vocabulary during children's play as the basis for academic learning. It begins with a discussion of the different types of play and adult's role in them including free play and 'scaffold play' in which the adult has a specific learning objective that they are trying to achieve with the child but the child is actively involved in directing the play. While recognising the value of both – free play for creativity and self-regulation, they note that free play tends to be based on ideas and language that children already know. Scaffold play allows for promoting thinking and language development. Drawing on research evidence the authors suggest several practical strategies for supporting children's language learning without limiting their thinking and creativity. Accessibly written and applied, this article is suitable for learners at NQF 5, 6 and 7.

⑥ ⑦ Aronstam, S. & Braund, M. (2015). Play in Grade R classrooms: Diverse teacher perceptions and practices, *South African Journal of Childhood Education* 5(3), Art. #242, 10 pages. <http://dx.doi.org/10.4102/sajce.v5i3.242>

This study looks at the perceptions of 104 educators in the Western Cape about supporting and using play in the Grade R classrooms in primary schools and ECD centres. Both well-resourced and under-resourced environments were sampled. The authors review the literature with a cultural lens on understandings of play. Interviews with educators indicate their belief in the value of play but contrast informal and structured/formal play, with educators generally preferring structured play as they are uncertain of their role during informal play. Challenges regarding implementation of play pedagogy across schools include inadequate teacher training on their different roles in supporting play but also space and availability of materials as well as the and explores educators' views on play in the curriculum. Suitable for NQF Levels 6 and 7.

⑥ ⑦ Bobis, J. ; de Vries, E.; Dockett, S. *et al.* (nd). Playing with Mathematics: Play in Early Childhood as a Context for Mathematical Learning. In L. Sparrow, B. Kissane, & C. Hurst (Eds.), *Shaping the future of mathematics education: Proceedings of the 33rd annual conference of the Mathematics Education Research Group of Australasia*. Fremantle: MERGA

In this Symposium four contributors give brief perspectives on the key role of play in young children's mathematics learning and examine the teacher's role in facilitating and extending it. Paper 1 reflects on how educators struggle to explain ways that they could use play to promote learning, and the essential requirement that they should understand mathematical content as well as how children learn in order to capitalise on opportunities for learning through play. Giving examples of different play activities in which there are mathematical learnings, they reflect on both the playful and learning content, inherent in each. In Paper 2 teachers' perspectives on play including maths experiences are explored as they move to greater engagement with children in play away from the notion that play based learning and teaching are at odds. Paper 3 reports on a larger study on toddlers' mathematical learning outdoors. They looked at the role of teachers in providing resources and environments for

exploration. The final paper seeks to determine Big Play – big ideas for early mathematics concepts that could be an opportunity for conversation, discussion, a question, or just observation and recording for later investigation towards mathematics development. Suitable for NQF Levels 6 and 7.

⑥ ⑦ Clements, D. H. & Sarama, J. (2016) **Math, Science, and Technology in the Early Grades. *The Future of Children*, 26, 2, Starting Early: Education from PreKindergarten to Third Grade pp. 75-94. Princeton University. Accessible at <https://www.jstor.org/stable/43940582>**

The authors review various effective curricula and approaches for promoting Science, technology, engineering and maths (STEM) in the early grades(Pre-K through K to Grade 1). While recognising that young children have an inherent interest in science and maths concepts which is shown during free play, Clements and Sarama cite evidence that calls for a more focused approach to STEM, indicating that free play, even if teachers intervene at teachable moments is ineffective. Teachers need to match content, levels of thinking and activities fine tune to children’s level of thinking and cover all steps in the developmental progression of the development of concepts. They do however talk of enriched high-quality learning rather than simple instruction mentioning manipulatives, games, computer assisted learning and robotics. This directed approach would enhance rather than compete with play-based approaches. Suitable for NQF Levels 6 and 7.

⑥ ⑦ Cutter-Mackenzie, A. & Edwards, S. (2013). **Toward a model for early childhood environmental education: Foregrounding, developing, and connecting knowledge through play-based learning. *Journal of Environmental Education*, 44(3), 195–213, DOI: 10.1080/00958964.2012.751892**

The starting point for this article is the diverse pedagogical approaches of environmental education on the one hand, now included in the Australian Early Years Learning Framework, which involves the gaining of specific values and knowledge and the focus on active learning through play for early childhood education which has less engagement on specific knowledge. Their study of 4–5-year-old children (kindergarten in Australia) sought to examine types of play - open-ended, modeled, and teacher child interactions as providing opportunities for young children and teachers to develop knowledge through experiences about environmental education. Their fieldwork generated a potential model of “purposefully framed” play which connects learning across the three play types - with provision of open-ended play, then modeled play, and finally opportunities for teacher/child interactions and engagement. While examples are given from environmental education, the approach would apply equally to other learning areas and is helpful in providing an integrated rather than dichotomised approach to the types of play. Suitable for NQF Levels 6 and 7.

⑥ ⑦ Edwards, S. & Cutter-McKenzie, A (2013). Pedagogical play types: What do they suggest for learning about sustainability in early childhood education? *International Journal of Early Childhood*, 45:327–346. DOI 10.1007/s13158-013-0082-5

While the authors write from the perspective of sustainability, a key aspect of environmental education, this article focuses on how to integrate the conceptual basis of sustainability education

with existing play-based pedagogies. Using a continuum approach including more open-ended and freely chosen to play to more teacher orientated play-based activities, they examine how different play types suggest different opportunities for teacher's engagement with children's learning on biodiversity. Edwards and Cutter-McKenzie used Vygotsky's description of combinatorial activity to consider the extent to which each play type prompts teachers to plan for children's engagement with biodiversity concepts in ways that are most likely to support knowledge construction. This article includes an excellent literature review and will be useful for educators seeking to unpack the elements of play-based pedagogy as much as for environmental educationalists. Suitable for NQF Levels 6 and 7.

⑥ ⑦ Lancy, D.F (2007) Accounting for Variability in Mother–Child Play. *American Anthropologist*, 109 (2) 273–284. (11 pages)

This article by a leading anthropologist challenges the notion that cultures where mother-child play is not the normal child rearing strategy are unenlightened and depriving their children of a self-evident route to normal development and an unlimited good. From an anthropological rather than psychological perspective and drawing on ethnographic descriptions of childhood rather than the observations of children in the upper strata of modern society, Lancy points out that mother-child play is often absent and that there are cultural and contextual explanations for this. In other words what psychology sees as natural, anthropology sees as cultural. He questions whether one should export play as a culture-specific child-rearing strategy to settings where it may be incongruent to local beliefs and practices. This provides an interesting local and indigenous knowledge perspective to play as an educational practice and explains some of the challenges of different cultural belief systems to play as pedagogy. Suitable for NQF Levels 6 and 7.

⑥ ⑦ Lancy, David F. (2012) "The Chore Curriculum" *Sociology, Social Work and Anthropology Faculty Publications*. Paper 574.

https://digitalcommons.usu.edu/sswa_facpubs/574

This chapter drawing on anthropological studies in Africa demonstrates how play among young children is the first stage of preparation for work. While Lancy recognises that "children's motivation to engage in make-believe and object play cannot be attributed solely or even primarily to the desire to learn their culture. The essence of play is its purposelessness. Still, there is little play that does not echo adult activity." There is indulgence for very young children in that they play roles that are not gendered, but as they mature, play is gendered. There is a progression towards learning is by participation in actual chores or tasks under supervision of older children and elders. The chapter looks at the role of older children in scaffolding learning in traditional African cultures and the lack of adult involvement in children's play. This is a useful article in that it highlights the traditional

practices that may well contribute to current parent and teacher attitudes about play and learning. Suitable for NQF Levels 6 and 7.

⑥ ⑦ **Ogunyemi, F.T. & Ragpot, L., 2015, 'Work and play in early childhood education: Views from Nigeria and South Africa', *South African Journal of Childhood Education* 5(3), Art. #344, 7 pages. <http://dx.doi.org/10.4102/sajce.v5i3.344>**

This article examines work and play within the framework of a constructivist early childhood curriculum, highlighting some of the cultural and contextual constraints to implementing a play based educational approach in ECE centres in both Nigeria and South Africa where academic learning is strongly entrenched as compared with a whole child constructivist approach. The authors reflect on the different dimensions of play and work within a constructivist early childhood education paradigm, with a focus on playful learning. What is particularly useful in this article is a frank discussion of what educative play is and a debunking of the notion that all play is worthwhile and educational. There is also a useful unpacking of the features of constructivist learning of different models of play (prefiguring the play continuum) . Suitable for NQF levels 6 and 7.

⑥ ⑦ **Pyle, A. & Danniels, E. (2017). A Continuum of play-based learning: The role of the teacher in play-based pedagogy and the fear of hijacking play. *Early Education and Development* 28, 3, 274–289. <http://dx.doi.org/10.1080/10409289.2016.1220771> (16 pages)**

This paper highlights the tension between academic and developmental perspectives on learning and play and the lack of play in many kindergarten classes. Because there has been an emphasis on play as child directed practice, teachers are unclear about how to implement a play pedagogy. The authors describe a small qualitative study including observations and teacher interview of 15 kindergarten classrooms. They describe two types of teachers one who dichotomise play and learning and so were challenged about how to meet academic demands through play, and the other who saw teachers as playing a role in play to support academic learning. They describe a play continuum including free play, inquiry play, collaboratively designed play, playbased learning and learning through games. This could be usefully compared with other play continuums presented in the literature. Suitable for NQF levels 6 and 7.

⑥ ⑦ **Ramani, G. B. & Eason, S. H. (2015). It all adds up: Learning early math through play and games. *The Phi Delta Kappan*. 96, 8. 27 – 32**

This article from the United States is an application of play to the teaching of early maths focused on kindergarten and first grade (equivalent to Grades R and 1 in South Africa). Citing studies from Head Start children's classrooms it provides practical examples of how play and games were used to promote the common core math standards and provides five recommendations for teachers. A useful practical example for Grade R and 1 educator. Suitable for NQF 6 and 7.

⑥ ⑦ Rogers, S. & Evans, J. (2007). Rethinking role play in the Reception Class. Educational Research, 49, 2, 153 – 167.

This qualitative study of the role play of children aged 4 – 5 years (Reception class in the United Kingdom) is used to highlight challenges between offering what is meant to be an informal play-based curriculum and how children respond to that provision. The methodology is child focused to elicit their experiences. The focus is on role play because of its significance for early social and symbolic activity. It was found that role play was negatively affected by lack of indoor space, and interruptions by teachers when children's play was interrupted due to time tabling of other activities. Further, teachers often grouped children rather than allowing for free choice. A useful article for practitioners in the South African Foundation Phase context to study as there are clear parallels. Suitable for NQF 6 and 7.

⑥ ⑦ Whitebread, D.(2012). The importance of play. A report on the value of children's play with a series of policy recommendation. Written for the Toy Industries of Europe. Accessible at http://www.importanceofplay.eu/IMG/pdf/dr_david_whitebread_-_the_importance_of_play.pdf (55 pages)

David Whitebread is a developmental cognitive psychologist and early years specialist. This report focuses on the value of children's play in supporting healthy holistic development of young children. It summarises the literature of research on children's play and its role in education in different cultural and historical contexts; explores research on the psychological processes through which play impacts on learning and development and sets out the research on five categories of play commonly used and factors which support or inhibit play. The review also includes the views of leading European play researchers and Play Organisations on key issues such as the value of play, screen-based play, the role of adults in children's play and provision for play. There is a short section on policy and recommendations for promoting play. There is an extensive bibliography. This is suitable for NQF Levels 6 and 7.

⑥ ⑦ Whitebread, D., Neale, D., Jensen, H., Liu, C., Solis,S.L., Hopkins, E., Hirsh-Pasek, K. Zosh, J. M. (2017). The role of play in children's development: a review of the evidence (research summary). Denmark: The LEGO Foundation. (39 pages)

This paper summarises evidence relating children's play and their learning and development from a range of disciplines including evolutionary psychology, developmental psychology, anthropology, neuroscience and education. It then presents evidence for the 0 – 8 age range related to the five different types of play – physical, play with objects, symbolic play, pretend play and games with rules. Key points are provided in summary boxes for each type of play. The concluding section looks at when and how play is more effective than other contexts for learning in relation to the five characteristics of play (see above) and identifies areas for further research. Suitable for strong learners at NQF 5 and for NQF 6 and 7.

⑥ ⑦ Zosh, J. M., Hopkins, E. J., Jensen, H., Liu, C., Neale, D., Hirsh-Pasek, K., Solis, S. L., & Whitebread, D. (2017). **Learning through play: a review of the evidence (white paper)**. Denmark: The LEGO Foundation. (39 pages)

Zosh and colleagues summarise current evidence on the role and importance of children's learning through play with a view on how it helps develop lifelong learners with skills and mind-sets to manage the uncertainties of rapid social change, new technologies and global challenges in the 21st Century. This requires holistic learning and learning to learn skills. The authors claim that play is the tool for this and present a continuum of playful learning from completely free play to more guided and adult designed and scaffolded play and that optimal learning takes place when the activity is joyful, meaningful, actively engaging, and involves iterative thinking and social interaction. Examples are given of studies linking each of these characteristics to aspects of learning. Finally, the paper identifies future research directions to enhance what is known about play and learning. Suitable for NQF Levels 6 and 7.

⑦ Fisher, K. R., Golinkoff, R. M., Hirsh-Paskek, K. & Newcombe, N. (2013). **Taking shape: Supporting preschoolers' acquisition of geometric knowledge through guided play.** *Child Development*, 84, 6, 1872-1878.

This study compared the learning about four geometric shapes in 70 4–5-year-old children in guided play, free play or didactic instruction. The literature review presents evidence for early mathematical learning under these three conditions. The study tested a range of pedagogical conditions for several shape related tasks administered over 15 minutes per child. Children in the guided play had improved shape knowledge compared with the other two groups. The findings suggest that scaffolding techniques that promote exploration, engagement and 'sense-making' are the underpinnings of shape learning. Suitable for NQF Level 7.

⑦ Fler, M.(2011). **Conceptual play: foregrounding imagination and cognition during concept formation in early years education** *Contemporary Issues in Early Childhood*, 12 , 3, 224 – 240. <http://dx.doi.org/10.2304/ciec.2011.12.3.224>

The increased worldwide focus on cognitive goals in early childhood education has raised questions of how this might be achieved in play-based programmes, which pedagogies were originally based on a maturational approach and play was child initiated and driven. Fler draws on the work of Vygotsky and Davydov using concepts from cultural-historical theory to see how play-based programs can build children's theoretical thinking in play, where imagination acts as the bridge between play as a leading activity and learning as a leading activity. She proposes that the consciousness of ideas in play by the child has its parallels with consciousness of concepts during teaching programs designed to support school learning. A new theory of play, namely conceptual play is presented, which Fler argues will help teachers work more conceptually with children in play-based programmes. Suitable for NQF Level 7.

⑦ Liu, C., Solis, S.L., Jensen, H., Hopkins, E., Neal, D., Zosh, J, Hirsh-Pasek, K. & Whitebread, D. (2017). **Neuroscience and learning through play: a review of the evidence (research summary).** Denmark: The Lego Foundation. (26 pages)

This paper takes the characteristics of playful learning identified by the Lego Foundation team – joyful, meaningful, actively engaging, iterative and socially interactive – and uses a neuroscience lens to explain how each connects with learning in the context of brain development. The review presents studies showing that each characteristic is associated with neural networks activated in brain processes during learning. These activated networks prepare the child’s brain for further development. However, as there is relatively little research on the neural underpinnings of learning in children thus far, the need for further research especially in diverse geographical and cultural contexts is noted. This evidence review is quite complex, assuming a familiarity with learning processes and the workings of the brain. Suitable for NQF Level 7.

⑦ Pyle, A., DeLuca, C. & Danniels, E. (2017). **A scoping review of research on play-based pedagogies in kindergarten education.** *Review of Education*, 5 (3) 311–351 DOI: 10.1002/rev3.3097

This recent review analyses 168 journal articles on playbased learning for 4 – 5 year old children. It looks at research on play for developmental learning, research on play for academic learning and factors influencing play in kindergarten classes. While play is generally seen as important for early learning, the articles reveal a somewhat binary position on the type of play (free or directed and the role of the teacher (passive or active) depending on whether the aim is developmental or academic. The authors propose a need to move to a position where types of play are viewed as complementary. The review demonstrates the role of cultural expectations in determining play practices including in Japan, Korea, China, Guatamala and India as well as in North America, New Zealand and the United Kingdom as well as the influence of teacher training, physical space and materials and educational policy requirements. A very useful synthesis of research on playbased pedagogy though only focused on the 4 – 5 year old age group. Recommended for NQF Level 7.

⑦ Rogers, S. Ed (2011) **Rethinking play and pedagogy in early childhood education: Concepts, contexts and cultures.** London: Routledge

This collection of 12 chapters by international experts, edited by the well- known educationalist from the University of London, covers key issues on play and pedagogy for the early schooling years. These chapters critically discuss play in the light of different pedagogical discourses and socio-cultural analysis and examine children’s power and participation. The practice of play pedagogy in different contexts is explored including Africa, India and Hong Kong. An excellent and thought provoking collection suitable for NQF Level 7.

⑦ Xinxin Want & Chin Bun Lam (2017) An exploratory case study of an American-style, play-based curriculum in China. *Journal of Research in Childhood Education*, 31:1, 28-39. DOI 10.1080/02568543.2016.1243175

This article provides a useful perspective on how 'gold standard' Western-style play based curriculum has 'landed' in a very different culture. The literature review provides a very useful description of the play continuum from free play through pedagogical play to highly structured teacher controlled activities. It examines previous studies of how Western education ideologies have been understood in China and then presents the findings of a small case study of how two teachers who endorse play in child learning actually understood and applied this and how Chinese traditional expectations for children and teachers indigenised the American- style curriculum. This is a very useful reading for NQF 7 learners.

⑦ Zosh, J.M., Hirsh-Pasek, K., Hopkins, E.J., Jensen, H., Liu, C., Neale, D., Solis, S. L. & Whitebread, D. (2018). Accessing the inaccessible: Redefining play as a spectrum. *Frontiers in Psychology* 9:1124.doi: 10.3389/fpsyg.2018.01124

This theoretical paper responds to questions of how to conceptualise play –free or guided drawing on the science of learning literature to illustrate how play characteristics (active, engaged, meaningful, social, iterative and joyful) support learning but where and when particular types of playful learning might prove more effective. Using the notion of a play spectrum also allows for different research questions and avoids the free play vs directed instruction divide. This paper is recommended for learners at NQF Level 7.

