



Working paper number 10 –

<https://www.monash.edu/education/research/projects/conceptual-playlab/publications/>

This is the Version of Record (VoR) of an article published (online) by the Faculty of Education, Federal University of Uberlândia (da Faculdade de Educação, da Universidade Federal de Uberlândia, UFU) in *Obutchénie: Revista De Didática E Psicologia Pedagógica* on 22 November 2019, available online: <http://www.seer.ufu.br/index.php/Obutchenie/article/view/51704> / [Article DOI: <https://doi.org/10.14393/OBv3n3.a2019-51704>].

We encourage you to use this preprint for educational purposes. It is intended to further scholarship for policy and practice, not for commercial gain. To cite this work, please refer to the published journal article:

Fleer, M. (2019). Conceptual PlayWorlds as a pedagogical intervention: Supporting the learning and development of the preschool child in play-based setting. *Obutchénie: Revista De Didática E Psicologia Pedagógica*, 3(3), 1-22. <https://doi.org/10.14393/OBv3n3.a2019-51704>

This work was supported by the Australian Research Council [ARC DP 140101131] and [FL180100161] for subsequent analysis.

# ***Mundos lúdico-conceituais* como uma intervenção pedagógica: dando suporte à aprendizagem e ao desenvolvimento da criança pré-escolar em contextos lúdicos**

## ***Conceptual PlayWorlds* as a pedagogical intervention: Supporting the learning and development of the preschool child in play-based setting**

Marilyn Fleer  
Conceptual PlayLab, Monash University

---

### **RESUMO**

Existe um interesse crescente em encontrar melhores maneiras de apoiar o aprendizado de conceitos em programas educativos voltados à primeira infância baseados na brincadeira. A introdução de termos como 'eduplay' em Hong Kong, 'Brincadeira intencionada' em Cingapura e 'ensino intencional' em programas baseados em brincadeiras na Austrália sugerem que os educadores estão trabalhando de diferentes maneiras para construir novas práticas que tragam brincadeira e aprendizado em unidade para dar suporte ao desenvolvimento das crianças. Este artigo contribui para esse cenário de pesquisa ao introduzir uma intervenção pedagógica chamada Mundos lúdico-conceituais (*Conceptual playworlds*). Esse modelo de prática é teorizado usando os conceitos vygotskianos de imaginação e brincadeira, e o modelo hedegaardiano de valores sociais, práticas institucionais e configurações de atividades como base para o estudo da aprendizagem de conceitos em contextos baseados em brincadeiras. O conteúdo deste artigo está situado no contexto curricular em mudança da primeira infância da região australiana, onde valores sociais para melhores resultados estão moldando práticas institucionais que criam novas demandas e condições diferentes para o desenvolvimento das crianças.

### **ABSTRACT**

There is increasing interest in finding better ways to support the learning of concepts in play-based programs in early childhood settings. The introduction of terms such as 'eduplay' in Hong Kong, 'Purposeful play' in Singapore, and 'intentional teaching' in play-based programs in Australia, suggest that educators are working in different ways to build new practices that bring play and learning together to support children's development. This paper contributes to this research landscape by introducing a pedagogical intervention called *Conceptual Playworlds*. This practice model is theorised using the Vygotskian concepts of imagination and play, and Hedegaardian model of societal values, institutional practices and activity settings as foundational for studying the learning of concepts in play-based settings. The content of this paper is situated in the changing early childhood curriculum context of the Australasian region, where social values for greater outcomes are shaping institutional practices which create new demands and different conditions for children's development.

**Keywords:** PlayWorlds. Cultural-historical. Imagination. Play. Child Development. Pedagogy.

---

### **1 Introdução**

In 2009 Australian early childhood educators were introduced to the concept of *intentional teaching* in order to foreground the importance of learning concepts in play-based

settings (AUSTRALIAN GOVERNMENT, 2009). At the same time, Rao and Li (2009) pioneered the concept of *eduplay* in Hong Kong. In many different parts of the Australasian region, early childhood educators have discussed a range of pedagogical concepts to support these new societal demands. In Singapore, the Ministry of Education (2012) conceptualised the relations between play and learning as *purposeful play*. Purposeful play includes characteristics, such as, imagination, authentic contexts, collaboration, taking risks and enjoyment. China through its reforms has also seen the emergence of play in the curriculum guide for the promotion of a play-based integrated curriculum (PAN, WANG, LI, 2018). However, Government has left it to the profession to formulate what this looks like in practice. Recently in Hong Kong, early childhood educators have been advised through the release of the Kindergarten Education Curriculum Guide (CURRICULUM DEVELOPMENT COUNCIL, 2017), to make learning joyful through play. The expectation of teachers in Hong Kong is for a play environment to be conducive to learning, such as, “Interest corners should be set up to encourage self-directed learning in children” (p. 29), and up to 50 minutes per day should be devoted to play time in full time centres.

The Northern hemisphere has also expressed concern for the schoolification (BROSTRÖM, 2017), academisation (HUSA, KINOS, 2005) and formalisation (ANG, 2014) of early childhood education. What is foregrounded in the Northern hemisphere research landscape, is the study of the interface between play and pedagogy (WOOD, 2014).

These reforms or curricula initiatives sit within an international context of change in early childhood education (FLEER, van OERS, 2018). What they collectively show is a need for re-examining the relations between play and learning – empirically, theoretically and pedagogically. Consequently, the aim of this paper is to contribute to the changing practice landscape through a pedagogical intervention called *Conceptual PlayWorlds* as one approach to support the leading activity of children for play (VYGOTSKY 1966), whilst at the same time recognising the need to create a personal motive for learning within play-based settings (HEDEGAARD, 2002). To achieve this aim, the first part of the paper introduces the central theoretical concepts underpinning a Conceptual PlayWorld. This is followed by details of intervention with examples from practice of the model being implemented in a preschool setting with children aged five years. The paper concludes by theorising the pedagogical characteristics of the intervention of Conceptual PlayWorlds in support of children’s development when bringing together play, learning and development.

## **2 The theoretical foundations relevant to the cultural age of the preschool child and the problem situation in the Australasian region**

Conceptual PlayWorlds as an intervention was originally inspired by the research of Gunilla Lindqvist (1995). Like other longstanding models of practice, such as Story Approach to Integrated Learning (SAILS) (LI, CHAU, 2010) and Storytellers and Story players (PALEY, 1990), Lindqvist developed a pedagogical approach that focused on children’s literature. Her central finding was an approach called *play pedagogy* that featured the aesthetics of play, and which she captured in a model of practice known as playworlds. Her research was theorised from a cultural-historical perspective.

Conceptual PlayWorlds has also been theorised from a cultural-historical perspective. Specifically, the intervention model draws upon Vygotsky’s conception of play (1966), development (VYGOTSKY, 1987; 1998) and imagination, emotions and creativity (VYGOTSKY, 1971; 2004). Although similar theoretical concepts have been deployed to that of Lindqvist, the focus of Conceptual PlayWorlds is on children’s meaningful learning of concepts in play-based settings. In Conceptual PlayWorlds learning is in the service of the children’s play. Conceptual PlayWorlds is the outcome of research into the play and learning of concepts in science (FLEER, 2017a), and for the development of executive functions in

play-based programs (FLEER, VERESOV, WALKER, 2017).

There are four theoretical assumptions underpinning a Conceptual PlayWorlds intervention model. First, a cultural-historical conception of play is defined as the creation of an imaginary situation, where children change the meaning of actions and objects to give them a new sense, and where children work imaginatively to create new meaning through different levels of abstraction. In this Vygotskian (1966) reading, what is central psychologically for the child, is a growing conscious awareness of the world in which they live and culturally engage. It is not the biological age of the child that dominates, but rather it is the cultural practices of their community that they experience and which they contribute to, when coming to understand the roles and rules of their particular community. Children move closer to reality in play because their play actions reflect what they notice and find important or interesting. At the same time, children move away from reality as they imagine and explore through their play actions abstracted concepts. In line with Vygotsky's (1987; 1998) conception of development, it is argued that this dialectical contradiction acts as the force for children's development.

Second, concepts to be learned are usually historically developed (science as a body of knowledge), culturally defined (Western science), and given meaning in everyday life through interactions with others (early childhood curriculum in action). When children use concepts in the service of their play, they have new possibilities in play and different ways of thinking (FLEER, 2017b). Vygotsky (1966) suggested that when two children who are sisters in real life, role play being sisters, they make conscious through their play actions the rules and roles associated with sisterhood. This means that play supports the child to think consciously about the concept of sisterhood. In so doing, the children's play actions deepen because they follow what might be morally expected of a sister – to act sisterly by being kind or inclusive for example. In this way, the concept of sisterhood is made conscious in play. At the same time, the concept of sisterhood is used in service of the child's play – to deepen their actions of showing how to be a sister, to follow the rules and roles of sisterhood that are important to them in their family, but also how this might be observed differently in other families. The concept of sisterhood as consciously brought into play offers more possible play scripts to imagine, to create in play action, and to conceptually and culturally explore. The concept is thereby acting in service of the children's play.

Third, play is not simply a reproduction of life (VYGOTSKY, 1966). Play is also a creative and imaginative production by the child. Children bring to their play insights and practices from everyday life, and in so doing are imagining and creating those actions in new ways. Children's play actions are imaginative acts which are experienced collectively in groups. Children produce new play scripts and negotiate these play scripts with their play partners. But what is different in a *Conceptual Playworld* is that play plots are introduced through the narrative of a story or through non-fiction play inquiry. In child initiated play, children generally do not follow and expand a play plot on their own. The general play literature shows that child initiated play is spontaneous and organic. Using a play plot to develop the complexity of children's play and play competence has been found in research by Lindqvist (1995) and Hakarrainen (2010) to deepen play actions, but it needs adult support. However, this is generally not a common early childhood curriculum practice in many Western and Western heritage communities. Collective play with a play plot would appear to fit well with early childhood communities who primarily use whole group teaching approaches – as is observed and reported in the literature for the Australasian region (LI, RAO, TSE, 2012).

Finally, a cultural-historical view of child development suggests that it is important for dramatic moments to occur that support children to think and feel more consciously about a particular phenomenon (VYGOTSKY, 1998). A revolutionary view, rather than an evolutionary change in development as observed through milestones or ages and stages, underpins Vygotsky's (1998) theory of child development. In a revolutionary reading of child

development, drama plays an important role for creating the dynamic tension or crisis to support development. In the context of *Conceptual Playworlds*, this means that the imaginary situations have dramatic moments that make conscious to the child particular moments, actions or ways of thinking about practice. Drama or dramatic moments are often observed in fairytales, but also in many stories (EL'KONINOVA, 2001).

Taken together, the core theoretical concepts of emotional imagination (VYGOTSKY, 1971), imagination and creativity (VYGOTSKY, 2004), play (VYGOTSKY, 1966) and Vygotsky's revolutionary view of child development (1998) are the foundation for Conceptual PlayWorld developed as a result of an educational experiment for addressing the problem of greater learning outcomes for preschool children in Australia.

### **3 Educational experiment to support the relations between play and learning in preschool settings**

Although the curriculum project of Charlotte's Web (White and Williams, 1963) is introduced as an example from practice in the next section, the work has come from expansive research into the relations between play and learning in Australian preschool settings (FLEER, 2017a; 2017b).

The story of Charlotte's Web introduces moral dilemma of culling the runt of a litter of pigs, which upsets Fern the 8-year-old girl who lives on the farm. Children live the emotional moments with the characters in the story and imagine the plot unfolding. In this story, further tension is created because Charlotte the spider becomes a special friend to the runt in the litter –Wilbur the pig. But spiders are often feared by children. The contradiction in the story emotionally connects with children's lives in different ways, making conscious to children the importance of spiders in the ecosystem. The drama in the story becomes the foundation for the Conceptual PlayWorld (see [www.monash.edu/conceptual-playworld](http://www.monash.edu/conceptual-playworld)) that is played by the children, and this drama when relived by the children in play, contributes productively to the children's development, learning and play actions.

In the research, two teachers over two years, were followed as they implemented a series of playworlds (FLEER, 2016). However, unlike previous research into playworlds, the focus of attention for the curriculum development centered on how to introduce to children in personally meaningful ways the learning of science and technology concepts (FLEER, 2017a). The curriculum project foregrounded in this paper for discussing play and children's development, was collaboratively developed between the participants and the research team using the core concepts from cultural-historical theory. Although the data and the analysis also followed how children entered into the activity settings of the Conceptual PlayWorld, that is not the focus for this paper.

The curriculum context included a total of 6 Conceptual PlayWorlds that were progressively developed as an educational experiment (HEDEGAARD, 2008) over two years (50 sessions over 2 years). The two teachers who co-taught the PlayWorlds (Rebecca and Oriana) had extensive teaching experience and the lead teacher (Rebecca) had studied cultural-historical theory and the playworlds literature generally. The teachers were familiar with the Vygotskian concepts of imagination (VYGOTSKY, 2004) and drama as a form of crisis in child development (VYGOTSKY, 1998), and Vygotsky's conception of play (VYGOTSKY, 1966). The focus of the ongoing professional learning and the educational experiment (HEDEGAARD, 2008) was on how to create motivating conditions for the productive development of play that would lead to conceptual learning of scientific, technological and engineering concepts (FLEER, 2017a). The data generated included the documentation of the professional learning, digital video observations (152.3 hours) of the teaching practices, interviews of the teachers in situ and during the professional learning (32.5 hours), digital photographs, and children's drawings and designs. This constituted a significant body of data

that were analysed using Hedegaard's (2014) model of development, which centres on the societal values, institutional practices and the personal perspective of the teachers and children as part of developing a motive orientation for learning. Hedegaard (2014) foregrounds the activity setting within the practices of the institution "where the relations between institutional objectives and the demands from the institutional practice can be studied in relation to a person's motives and the demands in the setting that are placed on both other people and materials" (p. 189). Activity settings was an important construct used in the analysis of the institutional practices developed through the educational experiment. The core Vygotskian concepts discussed in this paper were also used to analyse the curriculum, especially in relation to how imagination in play and imagination in learning were interrelated in the Conceptual PlayWorlds.

### 3 Conceptualising a Conceptual PlayWorld intervention

A main outcome of the research for creating motivating conditions for learning concepts in play was a Conceptual PlayWorld (FLEER, 2018). The Conceptual PlayWorlds is an intervention for realising learning outcomes in play-based settings in contexts where greater outcomes are expected at the societal level through the demand for changing the institutional practices of preschool settings. The outcomes of the research have generated a set of interrelated pedagogical characteristics for embedding learning experiences into play-based programs, but in ways that serve the children's play and support of the development of personally meaningful concepts. The curriculum example of *Charlotte's Web* is presented to illustrate the pedagogical practices of the intervention model that was an outcome of solving the problem of the new societal demand of introducing conceptual learning in play-based settings in Australia.

#### 3.1 Conceptual PlayWorld story as the activity setting for creating the imaginary situation

In line with Vygotskian conception of crisis as a developmental condition, the story acts as the centre piece for initiating and developing an imaginary situation with the children that is emotionally charged. Different to spontaneous play where the story line may not be known to all the children, using a story book means that the characters and the plot are collectively known and understood when children imagine together. For example, in the story of *Charlotte's Web* the story unfolds over the chapters of the book. Importantly the drama begins early and engages the children quickly and moves them into the imaginary situation of the smallest piglet in the litter being potentially killed. The story plot is dramatic and emotional. The story creates a dynamic tension, builds empathy and introducing a problem situation to the children: How to save Wilbur the pig? The problem situation emerges in each chapter, but in different ways, with new characters and contexts – thus deepening the possibilities for the children's play. The activity setting of the PlayWorld creates the imaginary situation, as was identified in the research and captured here as conversation between Rebecca and Oriana.

**Rebecca:** And we found over the various playworlds that if you can choose a story where you can really develop empathy with the characters that's one of the most important things for the children to then be engaged to help solve problems with the characters from the story. And particularly, we've found, animals.

**Oriana:** Yes, that's right.

**Rebecca:** Stories with animals have been particularly successful.

**Oriana:** So it was that connection to the character, and having that

emotional connection as well, and being able to respond and feel an investment, I think, an emotional investment to the story was really important for us.

The societal demands for increased learning outcomes for play-based settings in the Australian context means that the story selection must be considered in relation to the concepts to be learned. This is a different approach to previous playworlds where play development through narratives is foregrounded (HAKKARAINEN, 2010). In the Conceptual PlayWorld intervention, the educators plan the concept and its relation to the story and play plot and this changes their relations with children.

And sometimes the children are still, they're very keen to be involved but they're perhaps not ready to go really deep with the conceptual knowledge, so often they'll just sit in one of our laps, or they might be on our hip, so they'll be playing. They might be very happy to play the characters in the story, but they may need more support and experience it literally with you when exploring something like a concept about the ecosystem. But you can say, "Let's be the rain together," or, "Let's be the sunshine together," and so you can, with the child, help them to enter the play if they're feeling unsure. Whereas the other children will be completely leading it (Rebecca).

In this example of the story of *Charlotte's Web*, concepts such as ecosystem are learned when studying spiders in the environment, but the motive orientation for learning these concepts is developed through the story and the children's play. The anatomy of the spider is studied when children become curious about how a spider spins a web. Friendship and the exploration of emotions and emotion regulation are possible when being the different characters at different chapters in the story – such as Wilbur the pig being lonely and not having a friend; or empathising with Fern when she learns that the runt of the litter might be culled. Concepts are emotionally imaginative and children are motivated to learn concept to build the story plot. Ultimately, the concept to be learned must serve to enrich the children's play. That is, the motive orientation draws upon the children's leading activity for play (VYGOTSKY, 1966) or dominating motive, and uses it as a stimulating motive for learning (HEDEGAARD, 2002). The latter is introduced by the teacher through the story line and problem situation of how to help Wilbur. It is when the conditions change through the introduction of the problem to be solved, that this creates a new demand which can have a developmental effect. Hedegaard and Chaiklin (2005) have said, "development is understood as a result of the demands created in the social situation of development, which arises from the interaction between the children's motives and the adults demands associated with the practice in which they are engaged" (p. 64).

### *3.2 Designing a Conceptual PlayWorld space - Activity setting where children and teachers collectively change the meaning of actions and objects to give them a new sense*

The imaginary situation as discussed by Vygotsky (1966) is where children change the meaning of objects and actions to give them a new sense of the situation. The teacher draws upon this conception of play when designing the PlayWorld space to generate a collective imaginary play situation.

I think when planning the physical play space it took a little bit of practise for us to realise that you do actually need a designated area where you can go and be play partners with the children, and that can be quite open-ended (Rebecca).

So perhaps we were thinking about, will the children be bored with that situation, or will they not enjoy going through that particular space again, but we found that that was something that was quite successful. They enjoyed going through the tunnel, or through the gate, all those particular things were almost something that was reassuring for them that they were about to reenter into that play space and be really comfortable knowing that it was safe to immerse themselves in the play with their teachers as well (Oriana).

In the story of *Charlotte's Web* the educators used the outdoor area as Mr and Mrs Zuckerman's farm. Changing the meaning of the objects already in the outdoor space is done through imagination. The tressel becomes a pig sty, the fort acts as a barn, where Charlotte the spider spins her web, and tunnels become pathways for Templeton the rat to scurry down to find food in different locations (or potentially different PlayWorlds for the children to go down and imagine being in, such as the Fairground). It is through the teachers and children collectively entering into the same imaginary situation that children are supported in their play to change the meaning of actions and objects. In this sense, the story and the imaginary situation of the scene for the story creates new conditions for children's development. This is in contrast to the developmental view that children's play is teacher-free, a commonly held view, based on a maturational view of play development.

### *3.3 Collectively entering and exiting the Conceptual PlayWorld space – collective transition into and out of the activity setting*

In line with a cultural-historical concept of child development, in a Conceptual PlayWorld we see children and teachers visit the imaginary space multiple times over an extended period as the story unfolds and as new problem situations arise. Teachers support children to collectively go into imaginary situations by signalling the entrance and exit into the space. For example, in the story of *Charlotte's Web* the teacher puts up a sign on the gate: "Mr and Mrs Zuckerman's Farm" and this signals to the children that they are about to enter a collective imaginary situation. At this moment, the children and the teachers talk about what character they will be before entering. Then as they go through the gate, they transform into the character. This might mean there are a lot of spiders or many piglets, but it can also be that children with support of the teacher act out being different parts of the ecosystem – such as the annoying flies. A sign on the back of the gate, such as, "Please close the gate as you leave the farm" signals that the children are leaving the imaginary situation. Rebecca explains how she initially signalled the entry and exit into the imaginary play:

So with *Charlotte's Web*, we would line up on the log, and it's such a beautiful way to enter play. One of the things that we found particularly valuable about our play world experiences was that it involves the whole group, so it's a really effective pedagogical tool to be able to include every child in the group. And so part of that is that you all need to be in the same imaginary space, so in this situation that was *Charlotte's Web*, it was Zuckerman's Farm, it was the barn. So we would line up on the log and the children would choose their characters, and sometimes two people wanted to be Wilbur, that's fine, some days everyone's a spider, some days ... It really doesn't matter as long as we're getting into that space as a collective. And as the teacher I would always choose a character, so depending on what we had planned for that day's experience. So for example if we were introducing a new character I might be the rat that day, or I might be part of the ecosystem,



so I might be the sunshine that day. So it was a good way to get the children into the right head space where we're all imagining similar things (Rebecca).

The collective entry into the Conceptual PlayWorld actively supports the creation of an imaginary situation because the teacher physically signals entry and exist of the established story plot. There is a collective Conceptual PlayWorld and this is in contrast to children in free play settings who must independently negotiate their own entry into as imaginary play situation. The intervention actively supports children with their play development, because the teacher is sensitive to their zone of proximal development, creating the conditions in support of the next development period that children are proximally demonstrating at that moment in the play. As play is children's leading activity at the preschool age, the children have a strong motive orientation towards entering into complex play. In the Conceptual PlayWorld this is amplified through the collective story and imaginary situation that they enter and exist with support of their teacher.

#### *3.4 Planning the play inquiry or problem scenario – Changing the actions within the activity setting*

Hedegaard has argued that the societal values are reflected in the institutional practices, such as play-based program in preschool and a more formal learning program in school. The dynamic between societal values and educational practices in preschools is exemplified in the Australasian region where learning concepts has become increasingly important, thus creating a new developmental crisis in the preschool age period. Traditionally, transitions from one institution to another, such as from preschool to school, has been shown to create these kinds of developmental conditions for children, where the social position of the child (BOZHOVICH, 2009) changes to that of a school child, and the institutional practices change to become more oriented towards the learning of concepts (HEDEGAARD, FLEER, 2013). The new demands placed on teachers and children in the preschool setting for more learning outcomes is resolved through the intervention of a Conceptual PlayWorld. The Conceptual PlayWorld space supports the development of concepts, such as learning about the anatomy of spiders when exploring how spiders spin their web, or the role a spider has in an ecosystem. Planning the concepts to be learned in service of the children's play is key aspect of the Conceptual PlayWorld so that children become oriented towards learning in the activity settings of the preschool – but in ways that are personally meaningful.

Thinking through how the concept can enrich the children's play in the imaginary situation can add complexity to the children's play actions, whilst at the same time meeting curriculum objectives. Oriana foregrounds this new practice need.

It was always a lot of fun thinking about the problem and how we were about to go about it. So when we were thinking of the story of Charlotte's Web and the particular problem, that took a little while to think really carefully of how, again when we're thinking about the play worlds approach and how emotionally invested the children were, we wanted them to, we wanted that important hook. So we thought long and hard about this. Again, coming in as a character, as Farmer Zuckerman, I was able to just completely think of this problem with the children. And the beauty of that is that the children were able to completely connect with that character, and then we knew we could really take them on board in terms of being able to develop that concept. So being able to be really clear again about that concept helped us to plan very carefully about how that actual problem would

be presented through the character with the children so that we could immerse them in it with us and together, and really hear the child's voice in that problem (Oriana).

In the story of *Charlotte's Web* Oriana uses the character of Farmer Zuckerman to raise a problem "There are so many flies on the farm. They are really annoying". These scenarios lend themselves to the problem situation or play inquiry of how to be rid of flies. This play inquiry gives the possibility for learning about the ecosystem. But it also expands the play by introducing more characters to role play the scientific processes through the imaginary situation, such as being spiders being eaten. Further, when the children and the teachers are out of the imaginary situation, they do research that they can take back to Farmer Zuckerman next time they visit the farm. For instance, making a movie of the ecosystem of the farm on a digital device, or a report on how spiders spin webs, are examples of meaningful learning that can help Farmer Zuckerman deal with the fly problem.

Problem scenarios that relate to the story plot or extend it, such as learning how spiders can help reduce the number of flies on the farm, become stimulating motives for children's learning (HEDEGAARD, 2002). Learning of concepts gives more content to the children's play. For example, this is seen through children and teachers acting out the important role of spiders in the ecosystem (Charlotte can help), learning about the spider's anatomy to better understand how Charlotte actually spin her web (anatomy), and then more accurately acting out spinning webs (embodying concepts) as learning tasks that have become personally meaningful to children (FLEER, 2011). Learning enriches the play of the children in the imaginary situation, at the same time as affording meaningful and joyful learning of concepts as detailed in early childhood curricula. This is different to the playworld of Lindqvist (1995) and Hakkarainen (2010) because the societal values for greater learning outcomes for preschool children in Australia has created new demands upon teachers and children to find ways to orient children to learning as their leading activity in the preschool period. This has created the new need for an intervention that orients children to learning whilst at the same time recognises their leading activity for play as part of their cultural developmental trajectory. Learning as the new leading activity appears to be positioned in policy (GRIESHABER, 2016) and in practice (EDWARDS, CUTTER-MACKENZIE, HUNT, 2010; FLEER, 2011; WONG, FLEER, 2013) in Australia.

### *3.5 Planning interactions to build conceptual learning in the activity setting*

Different to previous research into playworlds which has focused on the development of play narratives through teachers partnering with children, is how Conceptual PlayWorlds positions teachers to plan their interactions as dynamic pairs. Inspired by Kravtsov and Kravtsova's (2010) concept of pair pedagogy, Conceptual PlayWorlds assigns different roles to each of the pairs of teachers when in the imaginary situation. Having two teachers in the imaginary situation is important because one teacher can be inquiring along with the children (equally present), whilst the other teacher can suggest ways to find out how to solve the play problem (model to the children). The teachers plan and enact different but complementary roles. For instance, to be above the children, to be equal with the children, to be below the children, and to be in a primordial we position with the children. Planning for this relation is important because the relations between the teacher and the children change, as explained by Rebecca:

Yeah, so something that was different for us, we'd always been fortunate enough to have the opportunity to team teach, but I wouldn't say that we work together in terms of planning our subject positioning - how we related to each other and the children. So really consciously

thinking about how to support certain children, how to enable other children to be leaders. So for example, each week we would plan a play episode and if we felt there was a child who needed to be challenged we thought very carefully about how we could position them in a certain way so that they could be an expert and inform the group. There were other children who needed a bit more help, so for example in Charlotte's Web we had one child who needed a bit of a confidence boost, so we gave him the very special role of being the seed inside the apple because it all grew from there, and he was thrilled to have that very important role in the play (Rebecca).

Subject positioning of the teachers in relation to the children is dynamically enacted. In the Conceptual PlayWorld of *Charlotte's Web* one teacher is present with the children (equal), acting out being a character in the story, watching all the flies buzzing around being annoying. The other teacher who is in role as Mrs Zuckerman can tell the children about her problem and ask for help. The teacher who is present with the children can say "Yes we can help" or "I am ready to help" so as to inspire and collectively problem solve with the children. This is different to team teaching or to having a team which includes a teacher and an assistant in the traditional roles seen in many preschool settings. Rather, in a Conceptual PlayWorld the roles are carefully planned so that there are opportunities to extend the play in character, to manage the children in character, and to introduce problem situations to deepen the learning, which in turn enriches the play of the children. The roles are not scripted. But the position of each teacher is carefully planned. Together this creates a dynamic interactional context that progresses the play and meaningfully supports children to work with concepts to solve the problem situation (Fleer, 2017a, 2017b).

#### **4 New practice traditions for teachers**

Taken together, the pedagogical characteristics discussed above of a Conceptual PlayWorld as an intervention, support preschool teachers with the central problem of introducing concepts into play-based settings. Theoretically, a Conceptual PlayWorld changes how teachers conceptualise their practice. That is, teachers are in the same situation, but change the meaning of the objects and their actions to give them a new sense. In the traditional preschool environment, the practice traditions with their activity settings of group time, snack time, sleep time, free play time inside and outdoor are maintained. However, in PlayWorlds, teachers and children collectively change the meaning of this physical space and imagine new play situations. Specifically, new activity settings are created that are collectively shared.

Broadly, there are two activity settings that together make up a Conceptual PlayWorld – the activity setting of the imaginary situation of the storyline; and the activity setting where children are researching problems. The transition is a fuzzy zone between these, because the entering and exiting into the Conceptual PlayWorld is supported by the teacher through a cultural device acting as a border (e.g., log, farm gate), and it is here that children can flicker (EL'KONINOVA, 2001) between an imaginary play situation of the story line and the conceptual research situation in support of the imaginary play. This is a new practice tradition for teachers. The flickering is a marker for teachers of children's agency, but it is also an important characteristic of personal meaning making of concepts to support play. It is the teachers who support children to enter into the imaginary situation, and who help change the meaning of actions and objects as a collective. This activity setting is imagined but collectively understood. Teachers draw upon children's motive orientation to play as the driving force for maintaining the collective imaginary situations. Hakkarainen (2010) has also shown that the teachers role in the play is a fundamental characteristic of a successful playworld.

Another change in the practice tradition of the teachers is planning and implementing Conceptual PlayWorld so that both teachers and children enter into the different activity settings of the Conceptual PlayWorld in ways that are motivating for both play and learning. Hedegaard (2002) has argued that a stimulating motive is planned by teachers to orient children towards learning. Her research has focused on schools, where the practice tradition is for learning discipline concepts. Inspired by Hedegaard's (2014) concept of motives for realising new societal demands for greater learning outcomes in preschools, Conceptual PlayWorlds was developed with teachers as a new practice tradition. Hedegaard (2014: 188) has argued that, "how actions in activities are nested within institutional practices" have a significant effect on "broader cultural expectations and traditions" and teachers in a Conceptual PlayWorld explored "motives within practices" that could be directed towards reflecting the "broader traditions" for greater learning outcomes, but in ways that support children's "personal motives" for the learning of concepts in service of their play. A new practice motive was generated and this motive is captured in a Conceptual PlayWorld through action of personally meaningful inquiries that are in service of children's play. This means the leading activity of children to play is maintained, but the actions and motives are oriented towards learning concepts. Hedegaard (2014) has said, "children's learning and development take place through their engagement in activities in specific institutional practices that are in turn influenced by motives and demands from other practices" (pp. 188). The aim of preschool practice in this Australian context has changed to include an emphasis on learning outcomes associated with school knowledge. But rather than to duplicate the practice traditions of schooling in the preschool sector, the educational experiment drew upon the leading activity of the preschool child to play as the stimulating motive to change the orientation of children towards learning concepts. New demands were made upon the children by the teachers. But also, the societal demand for greater learning outcomes put demands upon the teachers to develop new institutional practices to support learning in play-based settings. The Conceptual PlayWorld created motivating conditions for the children, but also the teachers to meaningfully support children's learning. The core model of development that underpins the new practice tradition focused on the drama in the collectively imagined situation and its resolution. The new practice tradition supported a new motive orientation towards learning whilst maintaining children's motive orientation to play. The new actions to solve problem situations in support of the drama in the imaginary situations were captured in practice as a collective, but also teachers were sensitive to the flickering between a motive to play and a motive to learn. The latter was indicative of children's transition as a dynamic fuzzy zone within a repetition of practices. This is line with Vygotsky's skipping metaphor in his revolutionary view of child development and which captures the dynamic between environment and person observed by teachers in Conceptual PlayWorlds.

## **5 Conclusion**

In this paper the pedagogical characteristics of a Conceptual PlayWorld model has been theorised using cultural-historical concepts and illustrated through the practice example of *Charlotte's Web*. What is different to previous models of practice, is how teachers in role with children, collectively enter into the imaginary situation together. Teacher planning of interactions as a pedagogical pair in the imaginary situation is also new. When dramatic stories are read or told, and children enter into these imaginary play situations with their teachers, who have planned problem situations, learning and play is enriched. Learning concepts in this model of Conceptual PlayWorld is always in the service of the children's play. In these dramatic and emotionally charged imaginary play situations, both children and adults experience joyful and playful learning (FLEER, 2018). The intervention model was presented to illustrate one way to address the new societal need in Australia for learning subject based concepts, but in ways

that maintain the practice tradition of a play-based program in early childhood education for the Australasian region.

## Referências

- ANG, L. (2014). Preschool or prep school? Rethinking the role of early years education, *Contemporary Issues in Early Childhood*, 14(2). 185- 199. doi/pdf/10.2304/ciec.2014.15.2.185
- AUSTRALIAN GOVERNMENT. (2009). *The early years learning framework of Australia*, Department of Education, Employment and Workplace Relations for the Council of Australian Governments. ACT, Australia.
- BOZHOVICH, L. I. (2009). The social situation of child development. *Journal of Russian and East European Psychology*, 47(4), 59-86. doi: DOI 10.2753/RPO1061-0405470403
- BROSTRÖM, S. (2017). A dynamic learning concept in early years education: a possible way to prevent schoolification, *International Journal of Early Years Education*, 25(1), 3-15, DOI: [10.1080/09669760.2016.1270196](https://doi.org/10.1080/09669760.2016.1270196)
- CURRICULUM DEVELOPMENT COUNCIL. (2017). *Kindergarten Education Curriculum Guide*. Hong Kong: Education Bureau, HKSAR.
- EDWARDS, S. CUTTER-MACKENZIE, A., and HUNT, E. (2010). Framing play for learning: Professional reflections on the role of open-ended play in early childhood education. In L. Brooker and S. Edwards, *Engaging play*, (136-151) Maidenhead, England: Open University Press.
- EL'KONINOVA, L. I. (2001). The object orientation of children's play in the context of understanding imaginary space — Time in play and stories, *Journal of Russian and East European Psychology*, 39 (2), 30—51.
- FLEER, M. (2011). Kindergartens in cognitive times: Imagination as a dialectical relation between play and learning. *International Journal of Early Childhood*, 43 (3), 245-259.
- FLEER, M. (2017a). Scientific playworlds: A model of teaching science in play-based settings. *Research in Science Education*, DOI: 10.1007/s11165-017-9653-z
- FLEER, M. (2017b). Digital playworlds in an Australia context. In T. Bruce, M. Bredikyte & P. Hakkarainen (Eds.), *Routledge handbook of play in early childhood* (pp. 289-304). UK: Routledge Press, Taylor and Francis Group.
- FLEER, M. (2016). Theorising digital play—a cultural-historical conceptualisation of children's engagement in imaginary digital situations, Special Issue on play. *Journal of International Research in Early Childhood Education*, 7(2), 75–90. [doi.org/10.1080/09575146.2018.1549024](https://doi.org/10.1080/09575146.2018.1549024)
- FLEER, M. (2018). Conceptual Playworlds: The role of imagination in play and imagination in learning, *Early Years*, [doi.org/10.1080/09575146.2018.1549024](https://doi.org/10.1080/09575146.2018.1549024)
- FLEER, M. and VAN OERS, B. (2018). International trends in research: Redressing the north-south balance in what matters for early childhood education research. In Marilyn Fleer and Bert

van Oers (Eds.) *International handbook on early childhood education, Volume 1*, (pp. 1-31), The Netherlands: Springer.

FLEER, M., VERESOV, N., and WALKER S. (2017). Re-conceptualizing executive functions as social activity in children's playworlds. *Learning, Culture and Social Interaction*, 14, 1-11. doi: 10.1016/j.lcsi.2017.04.003

GRIESHABER, S. (2016). Play and policy in early childhood education in the Asia Pacific region. *Asia-Pacific Journal of Research in Early Childhood Education*, 10(2), 7-28.

HAKKARAINEN, P. (2010). Cultural-historical methodology of the study of human development in transitions. *Cultural-Historical Psychology*, 4, 75–89.

HEDEGAARD, M. (2002). *Learning and child development*, Denmark, Aarhus University Press.

HEDEGAARD, M. (2008). The educational experiment, In M. Hedegaard, and M. Fleer, (Eds.). *Studying children: A Cultural-Historical Approach*. (pp. 181-201), United Kingdom: Open University Press

HEDEGAARD, M. (2014). The significance of demands and motives across practices in children's learning and development: An analysis of learning in home and school, *Learning, Culture and Social Interaction*, 3, 188-194.

HEDEGAARD, M. and CHAIKLIN, S. (2005). *Radical-local teaching and learning*, Denmark, Aarhus University Press.

HEDEGAARD, M. and FLEER, M. (2013). *Play, Learning and Children's Development: Everyday life in families and transition to school*. Cambridge University Press: New York.

HUSA, S. and KINOS, J. (2005). Academisation of early childhood education. *Scandinavian Journal of Educational Research*, 49(2), 133-141, doi: 10.1080/0031380500048865

KRAVTSOV, G.G. and KRAVTSOVA, E.E. (2010). Play in L.S. Vygotsky's nonclassical psychology. *Journal of Russian and Eastern European Psychology*, 48:4, 25–41.

LI, H. and CHAU, L. (2010). Story Approach to Integrated learning (SAILS): A postmodernism curriculum for Hong Kong kindergartens, In L.E. Kattington (Ed.) *Handbook of curriculum development* (pp. 329-346), New York: Nova Science Publishers.

LI, H., RAO, N. and TSE, S.K. (2012). Adapting Western pedagogies for Chinese literacy instruction: Case studies of Hong Kong, Shenzhen, and Singapore preschools *Early Education and Development*, 23(4), 603-621, doi.org/10.1080/10409289.2010.536441

LINDQVIST, G. (1995). *The aesthetics of play: A didactic study of play and culture in preschools*. Stockholm, Sweden: Gotab.

MINISTRY OF EDUCATION SINGAPORE. (2012). *Nurturing early learners: A curriculum framework for kindergartens in Singapore*, Singapore: Ministry of Education.

PALEY, V.P. (1990). *The boy who would be a helicopter. The uses of storytelling in the classroom*. Cambridge, Massachusetts: Harvard University Press.

- PAN, Y., WANG, X., and LI, L. (2018). Early childhood education and development in China. In M. Fleer and B. van Oers (Eds.), *International Handbook of Early Childhood Education*, Volume 1, (599-598) Dordrecht, The Netherlands: Springer.
- RAO, N. and LI, H. (2009). "Eduplay": Beliefs and Practices related to play and learning in Chinese kindergartens. In I. Pramling Samuelsson and M. Fleer, M (Eds.), *Play and Learning in Early Childhood Settings: International Perspectives*, (pp. 97-116) Netherlands: Springer doi: <http://dx.doi.org/10.1007/978-1-4020-8498-0>
- VYGOTSKY, L. S. (1966). Play and its role in the mental development of the child, *Voprosy psikhologii*, 12(6), 62–76.
- VYGOTSKY, L. S. (1971). *The psychology of art*. Cambridge, Mass.: M.I.T. Press.
- VYGOTSKY, L. S. (1987). *The collected works of L.S. Vygotsky, Vol. 1, Problems of general psychology*, R.W. Rieber & A.S. Carton (Eds.), trans. N. Minick. New York: Plenum Press.
- VYGOTSKY, L. S. (1998). *The collected works of L.S. Vygotsky, Vol. 5, Child Psychology*, trans. M.J. Hall; Robert W. Rieber (ed. English translation). New York: Kluwer Academic and Plenum Publishers.
- VYGOTSKY, L. S. (2004). Imagination and creativity in childhood. *Journal of Russian and East European Psychology*, 42(1), 7–97.
- WHITE, E., and WILLIAMS, G. (1963). *Charlotte's web*. Harmondsworth: Puffin Books in association with Hamish Hamilton.
- WONG, P. and FLEER, M. (2013). The development of learning as the leading activity for Hong Kong immigrant families in Australia. *International Research in Early Childhood Education*, 4(1),18-34.
- WOOD, E. (2014). Play-pedagogy interface in contemporary debates. In L. Brooker, M. Blaise and S. Edwards (Eds.) *The Sage handbook of play and learning in early childhood*, (145-156), Los Angeles, US: Sage.

### **Acknowledgements**

Sincere gratitude to the Australian Research Council for supporting the original research (ARC DP 140101131) through funding research assistance of Sue March and the two teachers for the intensive work needed in the educational experiment, and to the school and families for kindly agreeing to video record the children experiencing the *Conceptual Playworld* of Charlotte's Web.