CHAPTER 4

Reconstructing the Vygotskian vision of play, learning and development in early childhood

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Abstract: This chapter examines the complicated relationship between children's play, learning and development in early childhood from the perspective of cultural-historical theory. Recent widespread practices that aim to integrate play and learning into school instruction are often superficial, and do not propose a unified systemic approach. Cultural-historical theory that develops general stage models of child development, as presented by El'konin (1999), Bozhovich (2004), and Slobodchikov and Zuckerman (2003), highlights the main difficulty in separating cultural development and learning from each other. The new learning of young children occurs in social spaces through internal psychological processes, which cannot be directly observed. The solution to the problem could be to accept the claim of Vygotsky and his followers that early childhood pedagogy must focus on *personality development* and *creative imagination* as the core psychological function of early age. Creative activities such as *explorative experimentation* and *imaginative play* must become central elements in early education, giving the child a leading role and, thus, supporting their *self-development* processes. The mediated learning of children in narrative playworlds developed in the Play Research Lab in Finland is a possible solution.

Keywords: play and learning, personality development, creative imagination, leading activity, explorative experimentation, narrative playworlds

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Introduction

This theoretical paper deals with the methodologically complicated relationship between children's play, learning, and development from a cultural-historical perspective and provides perspectives for further research. Drawing on their years of research on children's play, the authors rethink theoretical understandings of child development and play in order to highlight the changing role of the teacher in early childhood contexts. We argue that dynamically developing narrative play activity rather than adult-guided playful teaching has the greatest developmental and educational potential for young children. Teachers must reflect more deeply on theoretical concepts and, through them, analyze their practical work. A critical analysis of theoretical concepts and their application in early education reveals the need for new theory-led play and learning practices, bringing a deeper understanding of child development and the role of the teacher.

There are opposing opinions among professionals regarding the essence of learning and play. But in recent decades, play has pervaded school instruction and learning (Parker & Thomsen, 2019; Singer et al., 2006; Whitebread et al., 2012). Its motivational, emotional, and regulatory potential has been named as the reason for integrating play elements into instruction. Some of Vygotsky's ideas on child development were used as a theoretical basis for such integration. We suppose that the practical effects lent more weight to the integration (better self-regulation, motivation, and emotional well-being). Play researchers did not advance to the core of instructional teacher-learner interaction like Kieran Egan, who proposed constructing curricula using a narrative story line as the skeleton of the didactic process (Egan, 1989, 1997).

Integrating play and learning in school instruction does not develop unified systemic processes. In our eyes, integrating play into teaching processes at all levels is often superficial and lacks theoretical understanding. We are faced with a relatively common situation where the educational practice only formally relies on theoretical ideas without a deeper understanding. Our many years of experience in the Play Research Lab in Finland (2002–2010) and in Lithuania from 2012, developing narrative play and learning practices, suggest that knowing the principles of child development and learning frees teachers and gives the profession a *creative dimension*, by allowing them to develop their educational practices more freely, taking into consideration the individual needs and cultural contexts.

Vygotsky strived to analyze systems of higher mental functions but did not formulate development theory or a complete model of an integrated play-learning system. It is possible to construct alternative models from the fundamental ideas of Vygotsky and their elaboration in the research of his followers: El'konin, Davydov, Galperin, Lurija, Smirnova, Kravtsova and many others. We focus on learning at "play age" (from approximately 3–7 years of age), when play is a *leading activity* according to El'konin's (1999) stage model of human development. Children learn a lot in connection with play processes before the age of three and after the age of seven. However, the system integration and causality are different concerning psychological development because play is not a leading activity then. Vygotsky (1966) called it "serious play" before the age of three, meaning that the child does not separate imaginary situations from real ones; it is playing "here and now" in an actual situation.

In the following paragraphs, we will discuss the key terms relevant to our theme and define the concepts of *activity*, *early learnin*g, and *cultural development* in the framework of cultural-historical theory. Then we will briefly introduce the three-stage models of human development proposed by El'konin (1999), Bozhovich (2004) and Slobodchikov and Zuckerman (2003) that underpin the main object of early development – personality development. Davydov (1988) singled out creative imagination as the core psychological function in personality development. We will further analyze the importance of *explorative experimentation* and *imaginative play* as central activities in early childhood. We will conclude by discussing mediated learning of psychological tools in narrative playworlds where adults *step into* children's play and create it together.

How is early learning understood in a cultural-historical approach?

First, we want to discuss the term *learning* in early childhood. Other words in different languages describe a child's learning and development at an early age before school. For example, developing mental abilities and creative skills before starting school is more emphasized in Russian. This is also the case in a few other languages that we know of. The Lithuanian term *education* (*ugdymas*) also has a broader meaning and refers to upbringing, nurturing, caring, and teaching, and a child's learning is seen broadly,

encompassing all aspects of life. Appropriation of the English term *learning* worldwide has eliminated other, more precise words in different languages and even changed educational practices. The problem is that it often narrows down and alters the more profound understanding of early learning as a complex phenomenon. The child's biological growth and mental development are extensive at an early age. Thus, when it comes to a child's learning, we can say that the child learns to master its body and psyche by interacting with the surrounding cultural models (ideal forms).

In general, forms of *participatory learning* prevail at this age. Rogoff's (1998, 2003) concept of *intent participation* defines a cultural tradition in which children learn by keenly observing and listening to ongoing activities as they participate in mature community activities. Some psychologists talk about *observational learning* and *learning from testimony*. Based on recent scientific studies, Gopnik suggested that such "social learning is more sophisticated and more fundamental. [It] is evolutionary deeper, developmentally earlier and more pervasive than schooling" (2016, p. 90). This type of learning is natural for young children and is a common way of learning in children's peer cultures.

In Vygotsky's words, we should talk about a child "growing into the culture" through appropriating cultural forms of behavior. The most active participant in this process is the child itself. An adult is a mediator, a model, and a mirror, but not an active teacher. Why? Most recent research shows how much young children learn from other people and that "very little of that learning comes through conscious and deliberate teaching" (Gopnik, 2016, p. 88).

The principle of graduated shared activity more precisely defines the role of an adult. Suvorov described it as "the principle underlying the birth and development of any kind of human activity: […] first together, then by oneself" (2003, p. 77). This principle was developed by Sokoliansky and Meshcheriakov (Meshcheriakov, 1974), following Galperin's (1959) theory of the "Development of Human Mental Activity" that continued the Vygotskian line of thought.

Vygotsky's understanding of learning in play situations must be constructed from different ideas in different contexts. First, a brief reminder of how cultural-historical and activity theory understands human activity (including play and learning). Any cultural human activity proceeds in two directions: it is turned to the external actions with the object, and to the internal, to the sense and meaning of these actions to the subject.

It is worth noting that the subject's intentions lead the actions, if we talk about the "activity" in the cultural-historical and activity theory framework. B. D. El'konin referred to the unit of activity when he said, "Object-oriented human action is two-fold. It contains the human sense and the operational side […] And they must be seen as two sides, and not as different and in no way connected spheres of the world" (2004, p. 35, translated by the authors).

In line with such an understanding, play activity as the leading activity type has an external object (*Gegenstand*, *предмет*). However, the playing child is simultaneously the subject and the object of their activity, or it is a dual subject of play ("me" and "my role" as subjects). Dual subjectivity was emphasized by Kravtsov & Kravtsova (2010; Kravtsova, 2014), suggesting it as a central dimension of play activity alongside the imaginary situation. Today's playworld researchers (Devi et al., 2018; Fleer, 2015) use the concept of double subjectivity as an analytical tool to analyze the teacher's position in relation to children's play in educational contexts. Dual subjectivity defines the child's position in play activity. Children's play actions are directed towards external purposeful movements and internal psychological processes, which Vygotsky called the "formation of psychological tools". They are appropriated from the surrounding culture and are mediated. Learning aimed at changes in internal psychological processes is indirect and often mediated by adults. A mediator cannot successfully give the child ready-made psychological tools. First, they must be given an external form from which the child can internalize them (Karpov, 2014).

Vygotsky and his followers' approach explains the childhood learning and development trajectory as a nonlinear, continuing process of qualitative changes in psychological (cultural) systems (systems of higher mental functions). The stages represent a chain of leading activities in children's lives adopted from Leontiev's (1978) activity theory. El'konin's (1999) stage model proposes a mini-cycle in each stage, which prepares the transition to the next stage. Mini–cycles consist of the motivational and latent period ending in a developmental crisis, as Vygotsky (1998) proposed. During the crisis, the child must solve the specific *social situation of the development* of each stage and deconstruct the motivation of the present stage, replacing it with the motivation of the next stage. Each crisis period forces the framework of mediation to change: the child's relation to adults, the social environment, and the self.

Slobodchikov and Zuckerman (2003) proposed a revised general stage model, using Vygotsky's general genetic law of cultural development

(Vygotsky, 1978) and Erikson's model of individual development (1980) as the framework. As a result, the stage model divides developmental trajectory into two proceeding lines: (1) social interaction producing new psychological phenomena, and (2) internalizing new phenomena into individual psychological processes. The individualization stage follows each social interaction stage, and both have different contradictions to be solved. Bringing the general genetic law to the stage model changes the character and the naming of the stages. This model covers the whole life trajectory of individuals.

General stage models of child development demonstrate the difficulty of separating *cultural learning* and *development* from each other. New learning occurs in social spaces through internal psychological processes that cannot be directly observed. Even when psychophysiological data is available, the mind and the psychological processes are not visible. A methodological solution, which Vygotsky proposed, is to move the focus of analysis to the collective, interactive social unit of learning and carry out genetic experiments. According to Vygotsky (1987b), the experimental-genetic method seeks to analyze the whole moving and flowing process of the formation of mental functioning. For Vygotsky, it was essential to grasp the development process as a whole, "not just its external or internal aspect" (1987b, p. 76).

Development of the child's personality as the object of early childhood pedagogy

The problem of the development of the child's personality was, for Vygotsky (1997), "the pinnacle of all psychology". Vygotsky's former student Bozhovich, who later became his co-worker, was one of those who tried "to trace the logic of Vygotsky's thought without going beyond the theories he constructed and to continue his studies following their original logic" (Bozhovich, 2004a, p. 21). She defined the stages of personality development through *new psychological formations* connected to the crisis periods at 1, 3, 7, 11 and 15 years of age.

Stages of personality development:

I. *Motivating representations* (crisis of the first year)
   - Birth of active behavior forms: the child becomes an actor but does not realize it.

II. *"I", "by myself"* (crisis of the third year)
   – The child becomes aware of him/herself as an actor separate from objects and other people.
III. *Social "I"* (crisis of the seventh year)
   – The child develops "internal positioning" and an understanding of the self as a social being. It seeks a position in the system of social relations.
IV. *Self-conscious person* (teenage crisis of the twelfth to the fourteenth year)
   – Ability to focus consciousness on one's own psychic processes and sense-making. The ability to focus on goals beyond the present situation emerges.
V. *Person, oriented towards the future* (youth crisis of the fifteenth to the seventeenth year)
   – Awareness of one's place in the future, the birth of a "life perspective".

Bozhovich underlined that a child's "consciousness is the center, in which all new psychological functions are integrated, which determines the individual's personality as a 'higher psychological system'" (2004b, p. 85). The formation of personality occurs not as an adaptation to the demands of the environment but as a *constant creative activity* directed at restructuring the environment and the self. The personality development trajectory proposed by Bozhovich differs from Leontiev's (1978) explanation, according to which a hierarchy of motives drives personality development starting from the crisis of the first year. Davydov's (1986) description was very much in line with Bozhovich. He proposed that the essence of an individual's personality lies in his *creative potential* and ability to create new forms of social life and himself. This process can be observed at about three years of age, when the child becomes a conscious subject of its activity. This is not the result of a motive hierarchy but rather the extensive development of the child's imagination, which Davydov saw as the psychological basis of creativity. The development of imagination is associated with the play age, when play becomes the leading activity in a child's life.

For a long time, Vygotsky's ideas about child development did not influence early childhood educational practices in the former Soviet Union and Russia. Although almost every early childhood program has claimed to have a cultural-historical approach to its educational practices, the reality may be somewhat different. The universal model at all levels has always

been adult-organized and guided teaching-learning. The idea of Davydov and his research team to publish a "Concept of early childhood education" in 1988 was an attempt to bring changes to early education. The project criticized existing practices based on the unified "mass model" in early education, and proposed a "personality-oriented model" instead. Education does not aim to produce identical child "clones". Individual differences must be strengthened and maintained parallel to developing the universal abilities and skills of all children. The main traits of this model that supported *personality development* were described as follows: Early childhood educational culture should

- Create a feeling of safety, trust in the world and joy in life.
- Form the basis of personal culture and support individual differences.
- Understand that knowledge, skills, and abilities are only tools for personality development, not final goals.
- Understand that educational interaction should start from the point of view of children without minimizing their feelings and emotions.
- Understand that a child is an equal partner in interactions with adults.

The importance of play activity was emphasized:

> Play develops skills needed to build imagination, volitional regulation of actions and feelings. It offers an experience for understanding the mutuality of activity. Combining children's personal experiences and the real influence of play makes it an appropriate tool for organising children's lives especially in early education. (Davydov, 1988, p. 32)

Vygotsky emphasized early learning in cultural-historical psychology, which follows the "*child's program*". In other words, the child decides what they want to learn and how; only the child's activity produces developmental changes – self-development. At this point, it is appropriate to bring up several significant ideas formulated by N. N. Podd'iakov relevant to our topic of children's learning, imagination, and play. Podd'iakov's (1977) scientific interests have focused on child development in early childhood and, more specifically, on cognitive development. He renamed the "child's program" *spontaneous learning* (*стихийное обучение*), which takes place in all of the child's life contexts. He claims that spontaneous learning is crucial in forming children's thinking processes before starting school. But the

correct balance between *self-regulated learning* and *adult-guided teaching* would be optimal. A key part of Podd'iakov's claim is that children are not learning ready-made knowledge and concepts but unclear, not fully organized knowledge.

Podd'iakov (1996, 2012), through his research, revealed that thinking processes simultaneously coexist in cognitive, emotional, and motivational spheres, qualitatively different in their degree of organization and maturity. A child's knowledge of the surrounding world and its objects is well-structured and comprehensive. At the same time, in other spheres, the knowledge of the child is undifferentiated, vague, and uncertain. This unevenness and these inconsistencies in knowledge create a situation in which children must independently fill the "gaps" of knowledge, and make new connections between completely incompatible sides of the same phenomenon. This task is resolved by the evolving *imagination* – the central mental function of 3–5-years-old children. Imagination creates the preconditions for forming the will, self-regulated behavior and abstract thought.

Podd'iakov (1996, 2012) concluded that personality development in childhood has an explorative and experimental character. He proposed that *explorative experimentation is the first leading activity* in a child's life; play comes next. Although he understood that a significant part of children's social experimentation occurred during play, he did not analyze the unique characteristics of explorative experimentation in children's play activities. Instead, he argued that, for typical child development, playfulness, a playful position, and a playful attitude are more substantial than play itself.

Furthermore, we can assume that explorative experimentation takes place in imaginative situations through role actions and interaction in play. Mastery of language and imagination are critical factors in play. Explorative experimentation follows narrative logic; nevertheless, children are aware of the difference between "real" and "make-believe".

Creative imagination is the core of a child's personality

Imagination evolves from developing memory, and evolving memory together with imitation "gives birth" to the imagination manifested in play actions with adult caregivers and later with peers. The actual "blossoming" of imagination is seen in pretend/imaginary play. Vygotsky (1998)

described children's play (at 3–5 years of age) as "imagination in action," and adolescents' imagination as "play without action". As the child grows and matures, its active and visible imagination as manifested in play activity becomes its inner psychological tool.

Why is creative imagination the moving force of personality development? A very general answer would be because human *development is a creative process*; human culture results from human creativity. Only through creative life do humans realize their potential.

> We can identify children's creative processes at the earliest ages, especially in their play […]. Children at play represent examples of the most authentic, most accurate creativity… A child's play is not simply a reproduction of what he has experienced but a creative reworking of the impressions he has acquired. He combines them and uses them to construct a new reality that conforms to his own needs and desires. (Vygotsky, 2004, p. 11)

How can imagination create something new by combining and modifying something already in existence? The Vygotskian answer is that images have a flexibility and modifiability that make it possible to extract characteristics and recombine them in a new way. Extract one part of an image and combine it with a new image. This unique image created in a child's mind can produce a new object. Vygotsky specified that this process starts in play:

> … the very essence of child's play is the creation of an imaginary situation, i.e., a certain semantic field which transforms the child's whole behavior and forces him to be governed in his actions and deeds solely by these imaginary situations and not by the visual situations. The content of these imaginary situations always indicates that they develop in the world of adults. (1987a, p. 229)

Vygotsky claimed that imagination creates representations rather than collecting information from the environment. In his writings, Vygotsky relied on French psychologist Theodule A. Ribot's work, *Essay on Creative Imagination*, first published in 1900. Analyzing the creative imagination of a child, Ribot (2020) defined four stages in the development of imagination:

I. Ability to elaborate visual perception (second year of life):
   - The child sees an object within another.

II. Animism:
   - Toys are imagined as living beings.

III. New images are created by combining characteristics:
   – Creating non-existing realities in play.
IV. Artistic creativity by recombining images into figures:
   – Creating new sense – revealing situations in pictorial form (e.g., hyperbola).

Vygotsky's followers continued to use his conception of the development of the child's imagination, so it is not surprising that in Davydov and his team's "Concept of early childhood education" (1988), there was a strong emphasis on supporting and stimulating children's imaginations as the basis for personality development. Davydov (1996) initiated multidisciplinary research on imagination, trying to summarize existing attempts to grasp it. The work of the philosopher Evald Ilyenkov helped to substantiate and further develop the concept of imagination in early childhood proposed by Vygotsky: "Imagination is the ability to grasp the whole before the details" (Ilyenkov, 1984, p. 220). Davydov applied this concept to a child's creative thinking. Ilyenkov (1984, 2002) claimed that imagination develops as a general ability that reveals the real essence of things. The claim is surprising because imagination is often understood as the opposite of reality, truth, and science, not based on facts. He emphasized the following functions:

– Imagination helps relate general knowledge to details.
– Abstract generalization is associated with empirical material.
– Imagination helps to understand facts and their importance immediately before analyzing details.
– Imagination is the ability to grasp the whole before the details.
– Imagination helps create new images and thoughts and, with a basis in these, further actions and objects.

Ilyenkov associated imagination with a unique way of observing cultural objects:

> The power of imagination can be […] defined as the ability to see things through the eyes of another person […], through the eyes of all other people, through the eyes of mankind, and to see not from the point of view of my individual interests, needs and desires, but from the point of view of the long-term interests of the human 'race'. (Ilyenkov, 2007, p. 82)

Creative imagination as the core of a child's personality development makes the demand of Davydov's team, for *joint play* of adults and children as the prime educational method, understandable. This is combined with the proposal for creating a *children's world* in early childhood education.

Mediated "learning" of psychological tools in playworlds

It is impossible to discuss all existing early childhood educational practices that develop the ideas of cultural-historical theory within the framework of one chapter; most of them are described in detail elsewhere (van Oers, 2018). This section will build on our work in the Play Research Lab in Finland and Lithuania, developing and experimenting with narrative play and learning approach (Bredikyte, 2011; Hakkarainen & Bredikyte, 2010; Hakkarainen, 2010; Hakkarainen et al., 2013).

First, we would like to introduce very basic theoretical statements on which we base our approach (Bredikyte, 2011; Hakkarainen & Bredikyte, 2013):

- Collectivity of the human mind (Donald, 2002; Vygotsky, 1994) suggests that cultural development is a *collaborative process.* Accordingly, all activities should be constructed bearing in mind this basic principle.
- Cultural development is a *dynamic process*; it is not about passing the existing (static) cultural model from one generation to another, but is a constant *re-construction* and *re-creation*. Cultural activities should not be taught or learned in a school-like manner: they should be obtained through concrete (bodily/emotional/intellectual/cognitive) shared experiences and *perezhivanie* (see also Skrefsrud, chapter 6).
- Play activity is the prototypal environment for the child's cultural development in its early years. Creative imagination (flexibility of thinking), narrativity and symbol construction (symbolic competence) are developed in play.
- From the perspective of cultural-historical theory, the subject of development is an integrated whole, which we call the *poly-subject.* This includes the *child*, the *adult*, *symbolic cultural tools*, and the *act of mediation* (Kudriavtsev, 1997; Bredikyte, 2011).

The playworlds constructed in Finland are elaborated from "children's worlds", as Davydov's (1988) team proposed. The project presented the idea of adults' and children's collaborative play to introduce fundamental human values to children. Adults acting as mediators have to become genuine play partners with children. They have dual functions in a playworld: (1) to be involved co-players, and (2) from the inside of play and their role in "play position," introduce (only if needed!) attractive play ideas elaborating the storyline of collaborative play.

Narrative playworlds have been described elsewhere by ourselves, as well as other scholars (Bredikyte & Hakkarainen, 2017, 2018; Fleer, 2015; Hakkarainen & Bredikyte, 2015, 2020). In this chapter, we will mention the main features of the approach. Narrative play pedagogy and the narrative play and learning approach are based on the ideas of Vygotsky, Davydov, Bruner, Lindqvist (*playworlds*), Egan, Engel, and many other outstanding scientists. After practicing it experimentally for about ten years, we introduced the terms "narrative play" and "narrative learning" in 2010 (Hakkarainen & Bredikyte, 2010). We coined the terms following Bruner's (1991) idea of the "narrative mind". The narrative is the smallest cell and a basic unit of our thinking – a unit of human thought. The approach combines children's narratives, play, exploration, and learning, in a specific way in which all the activities are embedded in the context of a jointly constructed storyline. Narrative play could be defined as an imaginative social role-play activity where children and adults jointly construct play events.

The idea of "playworlds" developed by Lindqvist (1995), based on Vygotsky's (2004) analysis of children's creativity and imagination, is behind the narrative play and learning approach. At the heart of a narrative playworld is a good story. The chosen story creates a specific framework and context for narrative play, but participants *improvise* and *recreate* the events. We might say that narrative play is an *improvisational dramatization*. It is an *interpretive activity* where the *child's point of view* is of key importance. The child tries to formulate, express, and actively enact its understanding of the events. In the narrative play and learning approach, joint creativity and improvisation are central.

> According to Lindqvist (1995), a playworld is a conscious effort to create a 'shared culture' or imaginary world […] By taking different roles and enacting the dramatic events of a story, the participants become involved in the perezhivanie (emotional experiencing/living through) of a common phenomenon. It moves adults 'inside'

> the play activity and puts them in an equal position with the children. From a developmental point of view, this is a very challenging situation that requires genuine involvement and a high level of sensitivity and creativity from the participants. (Bredikyte, 2017)

Participating in a playworld and constructing a motivating narrative provide exciting experiences that result in children's deeper understanding of the phenomena. Involvement in such creative play allows the child to enter the "adult world" and experiment with different psychological states, social roles, and human relations. The primary function of narrative play activity is to support the development of a personal narrative voice and the self in young children. Also, the *basic structure of a narrative form* and the communication model *are* mastered by young children.

A distinctive feature of the approach is adult participation in playworlds with children. At least three adults participate in the creation of playworld adventures and share different functions between themselves: (1) *adult "in role"* (a character from the story); (2) *adult not in role* (children's *play partner*); and (3) *observer* (adult person outside the play situation, documenting play activities).

In playworlds, adult players are mediators in elaborating play events and storylines. Adult participation and mediation occur through dual subjectivity: "in role", elaborating a joint storyline from their own role perspective, and creating imagined situations in which play occurs. In our playworld construction, adult mediation is mainly divided into three parts: introducing a playworld theme, visiting the imaginary world, and meeting characters. The themes are introduced using selected folk tales, fairytales, or stories dealing with fundamental human values and moral dilemmas. The use of literature as an initial step to the play theme was based on Zaporozhets' (1986) research on the close kinship between play and folk tales.

Another critical idea in Davydov's (1988) project was a demand for two parallel trajectories of development: (1) support for the individual characteristics of the child's personality, and (2) support for the universal age features. Support for individual characteristics must be based on the universal features of age. Such development presupposes movement from the child's willingness to direct its activity towards the self and mastery of appropriate psychological tools.

Why is mediated learning relevant in play and playworlds? One reason is the character of play as an activity type. The activity concept is usually defined as an object-oriented system in which an object exists in an environment of participating subjects. An activity system creates a result or product from its object and, simultaneously, subjects learn from the production process (Leontiev, 1978). Play does not produce visible material results; only the players learn and change. This is sometimes expressed by stating that a subject is simultaneously an object in play, and psychological tools are produced in play. Vygotsky (1966) explained how learning play rules as psychological tools of self-regulation takes place in play when rules relate to the emotional play experience (rules are transformed to emotions). At all stages of play, a child intersects with the conflict between rules and spontaneous actions. It acts against its immediate desires on the brink of its willpower in playing roles. The most significant power of self-regulation in a child arises in play. El'konin (1989) specified that at the beginning of social role-play, the child cannot set rules for play actions for itself before becoming a responsible actor. But rules for role characters are "outside" the self, and the child can follow them.

Play situations and "make-believe" conditions always refer to adult reality, even if children play themselves. Play events and role characters are mediated from real life or the virtual world; play props replace real objects or things. Vygotsky (1966) and El'konin (1978) supposed that the general motive of play is a child's desire to be like an adult. Content and initiation of concrete thematic play depend on the emotional material of play. The basic structure of role-play – experiencing and experimenting with another being in relation to the self – reminds us of the mediated learning experience in the Davydov-El'konin system. A child's role character is not a concrete person from the adult world but a child's construct, which the child improvises in steps. The selected role character is a generalization. The child is not imitating, for example, its own father or mother, but the idea of them as representatives of the adult world, even though most experiences come from them. Construction takes place alone or in cooperation with other players improvising a joint storyline (Leontiev, 1983).

Based on the ideas of Davydov's team, developmental early childhood education aims at general psychological (cultural) development in early childhood and during play age (from 0 to 5–7 years). Adult mediation seems a natural process because the social motive of play, to be like adults, is natural in children. However, developing a child's psychological tools

and guiding psychological processes is very complicated. The challenge is to support a child's motivated self-regulation as a personality characteristic and combine it with mediated learning. Zuckerman (2007) analyzed our narrative playworld projects in PlayLab Silmu in Finland and named the child's initiative as the starting point of adult mediation. Adult initiative/pedagogical intervention as an extension of a child's initiative might sound paradoxical, but seeing the problem as part of a more protracted developmental trajectory is necessary. The task of personality development cannot be solved by mediating through previous experiences and ready-made elements. Every meeting with a child is a new developmental task for the teacher:

> The task is new for the adult because he is seeking for the first time a method of adjusting his action to the action of this specific child in such a way that something new should arise at the place where the two actions meet (and as far as possible nothing should be destroyed). (Zuckerman, 2007, p. 51)

We argue that the development of a child's initiative must be analyzed through the trajectory of leading activities. Each leading activity creates the preconditions for a new leading activity that follows it. A child's initiatives in play are partly prepared in previous leading activities. Vygotsky stated that generalization changes at each new stage of development, and adult-child interaction, including mediation, must be changed: A "new type of generalisation demands a new type of interaction" (Vygotsky, 1984, p. 356). The change in the type of interaction becomes relevant in crisis periods, when the activity type needs to be changed (a new social situation of development). Before starting school, critical moments in Vygotsky's periodization are the crisis periods at 1, 3, and 7 years of age (Vygotsky, 1998).

Zuckerman (2021, p. 244–247) analyzed the parallel development of leading activities and leading forms of adult-child cooperation and neoformations formed before school. She proposed separating two types of neoformations: the first type, associated with the development of new subject matter and new layers of culture; and the second type, related to the assimilation of the form of collaboration itself. The functioning of neoformations of the first type ensures the success of a person's individual activity. Neoformations of the second type allow people to establish relationships with others and with themselves, and to form successful collaborations.

Table 1 Two types of neoformations of leading activities (according to Zuckerman, 2021, p. 246)

Leading activity	Content of leading activity	Leading form of collaboration	Neoformations	
			Of the content and methods of leading activity	Leading form of collaboration
Teaching-learning activity (6–7 years of age)	Develop forms of social consciousness	Learning collaboration	Reflection, analysis, planning	Ability to teach themselves
Play activity (3–5–7 years of age)	Meanings and norms of adult relationships	Play collaboration	Imagination, symbolic function	Ability to act in concert, taking into account the position of another
Object manipulation (1–3 years of age)	Ways of using tools and signs	Object-oriented collaboration	Speech, object-oriented actions	Ability to imitate the actions of another
Immediate emotional interaction (approximately 0–1 year of age)	Commonality with another person as the source of all benefits	Direct emotional communication	"foundational faith and hope" (Erikson, 1980)	Need for another person, ability to trust people, openness to communication

The table presents only an outline of such classifications of the mental neoformations of each age. This distinction is scarcely relevant for infants due to the close cohesion of the form and content of direct emotional communication.

It is appropriate to end the early childhood period with a list of some tangible characteristics that characterize a child entering a new phase of school learning. We could summarize this by saying that the main task of early childhood education is to lay the foundations for personality development, revealing creative potential and building a bridge to the next stage of development and learning. Mature forms of play perform this task by developing a child's general learning potential: (a) general creativity (creative improvisation, symbolization, etc.); (b) motivation; (c) imagination; (d) volition and self-regulation; (e) understanding of the other person's perspective and how human relations work in the world in general (Bredikyte, 2011).

Conclusion

Let us try to summarize: Cultural-historical development theory unequivocally puts the child's development in the foreground from an early

age. Why is it important to talk about development first but not learning? Because learning presupposes teaching, and who can tell how to teach such young children? We cited Vygotsky (1998) insisting that young children follow their "own program" of development, making it an even more mysterious phenomenon. From an early age, a child learns all the time and learns many things simultaneously. Its "teacher" is the whole social environment that interacts with it. What constitutes a child's learning, and what is the object and content of their learning? First, who am "I", and how do I relate to others, myself, and the world? Next, what does it mean to be "human"? A specific object of the play age (at 3–7 years of age) is human relations. Children explore human relations with themselves, others, and the world. More profoundly, they explore the human values manifested through the relationships.

It is clear from this first statement that a child's cultural development and learning are collective in nature, because everyone in their environment is their teacher. At the same time, they are the teachers of others. A unit of development is the whole socio-cultural environment available to a child. One of the defining features of development is unevenness: the pace and forms of development in different children may vary. The development process is creative in nature, and the subject of development is always the child itself. Development takes place through its active participation in cultural activities. A child's participation is of improvisational character and manifests itself through exploration and experimentation.

Of course, by participating in any cultural activity, a child learns various skills, but their learning is contextual, self-directed, and self-regulated. The child chooses what they want to learn because they need that skill to participate in the culture. It is essential to note that young children do not care much about the technical side of skills before school. Researchers describe the learning of young children as "discovery learning" because "mastery learning requires a kind of controlled focus that is just not possible for younger children" (Gopnik, 2016, p. 183).

In conclusion, we would like to emphasize once again that the most favorable space for a child's development and learning is a play activity.

> In play, a child develops and masters the structures of their thinking. Mature forms of imaginative play lay the foundations of the inner forms of basic human notions. Play provides the channel of expression of the child's emotional experiences and releases their spiritual potential. […] Creative play is enormously spacious: everybody can participate regardless of their age, skills, and individual differences. It can

> accommodate all possible experiences of the young child and provide the space to explore those experiences and enact them with other children. We can follow the externally visible events when we observe children playing. Each child participating in the same play activity constructs their play version. Often children incorporate their play themes into more extensive play. […] there are many different levels of play and many minor themes in one big play activity. The potential of advanced imaginary play is enormous, and everything depends on the players' skills. These skills are developed only through playing together. Skilful adult participation helps incorporate several children and their themes into one creative endeavour. (Bredikyte, 2011, p. 203)

We make these generalizations based on our long-standing research and experimental work. Nevertheless, it is paramount that our findings and many theoretical statements are supported by theoretical insights and analysis from scientists in distinct theoretical paradigms and different scientific fields (Diamond & Hopson, 1999; Gaskins, 1999; Gopnik, 2009, 2012, 2016; Legare et al., 2015; Meltzoff et al., 2012; Rogoff, 2003; Sterelny, 2012; Tomasello, 1999, 2009; Zelazo et al., 2008).

Interestingly, most of the key ideas in this chapter are based on Vygotsky's (1966) article on the significance of play for a child's mental development. His article, originally a lecture transcribed in 1933, is still an unsurpassed text for today's developmental psychologists and early childhood educators. What is the secret of these fourteen pages? We believe that in his lecture, Vygotsky very thoroughly analyzed the formation of the mental processes in children (aged 3–7 years) and revealed their manifestation through the dynamics of play activity. For us as scientists, this is an example of how deeply we need to study the phenomena of the human psyche before proposing appropriate educational methods. As educators, we regret that even today, we usually only look at external attributes such as abilities, skills, and competencies in early childhood education. If Vygotsky could, he would ask, what constitutes their psychological essence? Do we know the answers?

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Milda Bredikyte has been a senior researcher and associate professor at Vytautas Magnus University in Lithuania since 2018. She teaches child development and narrative learning in play and the Vygotskian theory of cultural development in childhood, and is the senior researcher and coordinator of research activities at VMU's research laboratory of play. Bredikyte

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Pentti Hakkarainen (1944–2021) was a professor at the University of Oulu in Finland and Vytautas Magnus University in Lithuania, and the head of the research laboratory Play Lab "Silmu" at Oulu University and the research laboratory of play at Vytautas Magnus University. Hakkarainen taught early education, developmental teaching, and research methodology. From 1997 he was a professor of early education at Kajaani University Consortium, University of Oulu, and from 2000–2021 he was also the editor of the *Journal of Russian and East European Psychology*. Hakkarainen's research interests included creative, developmental teaching and learning in preschools, schools and higher education, narrative learning and development in play and virtual environments.

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