Learning Through Play

The Importance of Play in Childhood and its Implementation in the Learning Process

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Abstract

The article examines the development of play in early childhood and its central role in human development. Play is described as a fundamental activity that, from the earliest stages of life, promotes growth and social integration. In particular, free childlike play is invaluable, as it is based on natural, intrinsic motivations and allows children to explore their environment without external directives. In doing so, they gather a wide range of experiences that are deeply rooted emotionally and, therefore, long-lasting. Play develops in phases: while toddlers expand their imagination through imitation and symbolic play, preschool children increasingly structure their games with rules that provide orientation and foster social skills. In school-age children, play becomes more complex, focusing on competition, self-awareness, and experimental learning, which further develops their cognitive and motor abilities. The cultural context of play is also addressed, with play being viewed as an anthropological constant that exists in all cultures. It is argued that culture often has its roots in play and that free play is a spiritually necessary part of human life. Finally, the importance of didactic games in education is emphasized. These games combine playful elements with educational content to enhance learning and increase primary school students' motivation. An example of this is a lesson on the topic of the meadow habitat, where playful methods are central to knowledge transfer.

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1. The Progression of Play Development in Early Childhood

The term "play" is used in various contexts, most commonly in relation to children's activities. However, play is also integral to adult life. Baer (2020, p. 467) describes play as a self-contained world with its own specific people, rules, and actions. According to Mogel (2008, pp. 6–43), children's play reflects cultural and social positions, forming a central intersection in the cultural development of humanity. Play and human existence are inseparable. When considering human development, play assumes a vital role in the holistic growth of a human being, with a particular emphasis on free childlike play. Free play is one of the most natural and important methods of preparing for future life (Sauerbrey, 2021, pp. 16–22). Through play, children gain countless experiences associated with emotions, which are more sustainably anchored in the brain. One of the first experiences children have through play is exploring their own bodies. Newborns initially become reflexively familiar with their bodily functions and, simultaneously, gain their first valuable self-efficacy experiences. These processes resemble play, as they are often repeated and experienced affectively. During toddlerhood, children imitate adults and assign new functions to objects from their environment during play. A block of wood might become a car, a teddy bear might become a child, or a roll of paper might become an airplane. In doing so, children develop and foster their imagination, which is based on experiences and observations from their surroundings. In genuine childlike play, children are absorbed and immersed, playing intuitively without any external prompting. In this developmental phase, children make significant progress in linguistic, cognitive, and motor areas. Childhood play development occurs in phases, but this does not mean that children abandon past play phases or experiences. The most crucial finding is that as children develop, they make more complex demands on play. For example, in early childhood, they are intrinsically motivated to take on and act out various roles, often imitating adults or transforming themselves into imaginative characters. In preschool, children increasingly develop an understanding of how to organize a game and how to adopt and adhere to rules. Rules provide children with orientation and order in play, which are essential for normative interaction within a community. According to Thiele

(2020, p. 145), rules determine who participates in the game, which moves are allowed, and which are forbidden. Those who do not abide by the rules cannot continue playing. The internalization of rules leads to social development and the assumption of new roles and functions. In elementary school, children show an increased interest in competition and experimentation. They are not primarily interested in winning but in self-knowledge and assessing their abilities in comparison with their peers. Questions such as "What am I good at?", "What talents do I have?", and "What superpowers do I possess?" become central. Through experimentation, children develop hypotheses and seek to explore them. Curiosity drives them to explore the world and natural phenomena. As they grow older, children develop the need to systematically build something concrete or according to a plan. One of their first attempts might be building a tower. Stacking blocks and trying to build the tower as high as possible fascinates all children. With more complex play activities, other ideas emerge, such as constructing a garage, a bridge, a spaceship, or a superhero. During construction, children learn how to plan and proceed systematically. Through trial and error, they learn to overcome difficulties and focus on their set goals. The physical and mathematical experiences gained in this process are indispensable for cognitive development at this stage. In addition to the above-mentioned areas, construction also promotes children's sensory-motor skills and creative problem-solving abilities.

2. Huizinga´s Views on Play: Exploring its Societal Contexts

Play is a cultural product that occurs within social contexts. When a person is born, they enter a society in which they develop and socialize as a personality. According to Abels (2019, p. 57), socialization occurs as an interaction between an individual and a group, wherein individuals interact by coordinating and adapting their actions. Play is a basic anthropological constant, existing in all cultures and on all continents. One of the most famous cultural theorists, Johann Huizinga, interpreted human culture through his work *Homo Ludens* (1938/1981), which explores the concept of „the playing man". Huizin-

ga argued that culture originates and evolves in the form of play, which he described as being older and more original than culture itself. He stated

> I do not claim that culture originates from play, but that it grows in play, and furthermore, that in some cases it retains its play character where one does not expect it or is aware of it; in short, play and seriousness are inseparable or merge into each other in culture. (Huizinga, 1938/1981, p. 22)

He called play a „primary life category" characteristic of living beings, placing human and animal play on the same level. Culture, which arises from play, emerges when play cannot be assigned a vital biological function. If play arises through free action and from an inner need, the cultural value created in the process spiritually enriches the human being. From Huizinga's perspective, a game is „a struggle or a representation of something" (p. 22). Free play is free of material interest, and the meaning of a game is not tied to externally determined norms and rules. The playing individual decides for themselves which rules apply. Free will determines what is played, with whom, and how the game proceeds. Huizinga affirmed that play has no practical purpose and proceeds according to its own rules, with the only reason to play being the pleasure of the game itself. From a philosophical-anthropological point of view, play is a spiritually necessary existence, indispensable for the development and elevation of human life in its spiritual and social dimensions.

3. Activation of Interest and Motivation Through Didactic Games

Before discussing didactic play, it is necessary to explicate free childlike play and free play in the school. Free childlike play arises from a child's intrinsic motivation to play and is not determined by spatial and temporal factors. The child's desire to play develops spontaneously and does not require external motivation. In free play, the child creates their own scenarios, immerses in fantasy, makes decisions, and pursues interests without external guidelines or goals. The value of such play is reflected in the child's emotional experi-

ence and must be viewed exclusively from the child's perspective. Free play is a natural way for children to explore themselves and the world, practice skills, and express creativity and emotions. Additionally, free play offers children a way to have fun, relieve stress, and express emotions. The current state of research clearly shows that free play plays a central role in children's development. The positive effects on cognitive, psychosocial and psychomotor development in this context have been proven by numerous studies (Hirsh-Pasek & Golinkoff, 2008; Elkind, 2008; White, 2012 and others). Free play in children is characterized by specific features, including spontaneity, a focus on the present ("here and now"), variability, freedom of purpose, voluntariness, imagination and deep immersion in the play process.

The term "free play" is not to be equated with the free play of children. This term and form of play are mainly used in educational institutions. We talk about free play when free childlike play takes place in an educational setting where the play environment is defined by a variety of play opportunities, content, and materials (Engel et al., 2022, p. 42). Like free childlike play, free play in educational settings is initiated by the child's own impulse, and the child determines the course of play. Learning progress occurs casually, as the playing child is intrinsically motivated to explore and experience new things. During free play, children perceive their environment in context, experiencing themselves, other children, and objects within the educational institution in a causal manner. The playing child processes, encodes, and orders sensory impressions, forming new cognitive structures and experiencing themselves as active participants in their environment. This contrasts with guided play, in which children only have limited control over the content, duration, partners and rules of the game. In school contexts, this is predominantly initiated by the teacher and is geared towards specific learning objectives. Guided play is a form of game-based learning and has some characteristics of free play. However, positive emotions and an action-oriented engagement with learning content can only be achieved if the game arouses the curiosity of the learners and offers an exciting process (Moser, 2024, p. 35).

Empirical studies (Bonawitz et al., 2011; Hopkins et al., 2019; Sahlberg & Doyle, 2019) illustrate the different effects of free and guided play from different perspectives. While free play leads to more intensive exploration and more diverse cognitive operations, guided play focuses on specific content,

which can limit spontaneous discoveries. At the primary level, free play is either planned as a morning activity to "get used to things" or as a learning phase in the classroom, often as a reward or to help pace the lessons. For primary school, a didactic integration of both forms of play and a varied repertoire of methods is recommended in order to meet the needs of the children. A didactic game always aims to acquire new knowledge, promote existing knowledge, or make it more flexible. It combines playful elements with educational content to make learning more enjoyable, motivational, and effective. At the primary level, didactic games are used in diverse learning contexts, characterized by a balanced combination of fun and learning. One aim of a didactic game is to activate students' interest and motivation for learning, inspiring them to learn through play. In the classroom, didactic games might take the form of language games to train vocabulary, grammar, pronunciation, or comprehension. In mathematics, games can support the learning of mathematical concepts. In science, games help to elicit and deepen knowledge of phenomena, and in music, games enhance skills and techniques. Logic and thinking games are played across subjects to train logical thinking, problem-solving skills, and critical thinking.

4. Deep Structures in Didactic Games: From Learning Goals to Game Content

Games, much like educational methods, possess deep structures that go beyond their surface elements. These deep structures are crucial for fostering cognitive activation, constructive support, and effective engagement, making them powerful tools for sustainable learning. Deep structures are interpreted differently within educational science discussions (Pauli & Schmid, 2019, p. 168), but they are most associated with cognitive activation, constructive support, and effective classroom management. Unlike surface structures, deep structures focus on the formation and understanding of concepts. In learning, various methods and strategies are applied to trigger deep-structural effects, such as actively processing information, making connections, asking questions, explaining concepts, transferring learning to new situations, and reflecting on what has been learned. This process fosters genuine under-

standing, a hallmark of sustainable learning. The deep structures of a didactic game depend on the learning goals and content. A learning game aims to elicit preconceptions, build new knowledge, make it flexible, and consolidate what has been learned. In these learning phases, observable in the classroom, students actively engage with new challenges in an interactive relationship. A didactic game promotes active learning if it excites learners and challenges them during play. The surface of a didactic game comprises all observable characteristics, such as the age group, game form, subject area, rules, design, number of players, duration, and game materials.

5. Outlined Double Lesson: "Habitat of the Meadow" - Play as a Central Method of Knowledge Transfer

When planning a lesson series or a teaching unit, teachers decide on the competencies to be built up in the classroom. Competency development is centrally oriented to both children's ideas of how they perceive and think about the world and phenomena, as well as to specialist knowledge. In this context, phenomena have to be explored from multiple perspectives and related to children's everyday life. The lesson is to be understood and conceived as a child-friendly learning environment. Effective teaching is reflected in a concrete confrontation with cognitively stimulating and child-friendly learning tasks, which challenge children, for example, to observe, determine, play, apply, prove, explain, research, and explore. All of these are potentials of an extracurricular learning location.

5.1 Exploring the Meadow

The topic "The Habitat Meadow" can be effectively formulated and explored in the classroom when the teacher links to the everyday experiences of the children and lets them explore and discover "the meadow" through exploratory and playful methods. The goal of the planned teaching unit is that the students get to know and experience the individual levels/floors? of the meadow and which animals live in each one. Through the playful design of the learning environment, the children will understand and recognize that the meadow and the animals of the meadow are interdependent. In the teach-

ing unit, the children's ideas and interest in the topic are stimulated by a fantasy journey. The fantasy journey contains fairy-tale and fantastic elements that tie in with the children's world of life. The fantasy journey promotes attention, concentration, abstract thinking, and creativity cognitively. When puzzling, students are challenged to solve problems and argue. Just like open questions, puzzles promote the children's analytical thinking. Puzzles playfully link the children's preconceptions with new information. In addition, puzzles also promote children's communicative skills. In the teaching unit, the new topic is worked through using a developed synthesis game with playing cards, promoting cognitive learning processes, social skills, and eye-hand coordination. Playing with learning cards playfully foregrounds the competence area of reading. The description of a meadow animal's habitat on the respective cards is designed to encourage children to think logically, analyze, and decide. The synthesis, i.e., the assignment of the cards, takes place in the last phase of understanding as a joint decision by the children. In the movement game, the competencies of social studies are linked with the competence area of speaking. Children implicitly learn the structure of a story, how to express themselves clearly, how to listen attentively to other children, and to observe the rules of conversation.

Preparation

The planned unit of instruction presumes that the students have already received an introduction to the topic and have noticed a meadow, perhaps around the school grounds, made targeted observations, acquainted themselves with individual plants and animals, and have exchanged their observations and knowledge.

Introduction

The introduction is made via a fantasy journey, where the teacher tells a meadow story to the children in a circle, placing each child in a meadow landscape.

An example of a fantasy journey

Imagine you're in a magical meadow with thousands of colourful flowers. They smell so beautiful that it seems like they are smiling at you. The grass

feels as soft under your feet as your fluffiest carpet at home. The sun shines in the sky and its light tickles your face. You decide to take a small break. You lie down in the grass, close your eyes and listen to the meadow. What do you hear? A cheerful chirping, a quiet sneaking, a fluttering wing beat, a gentle humming, a joyous jumping, a patient crawling, a diligent digging, and a mysterious rustling! All this makes you curious – who are all these inhabitants of the meadow? You open your eyes and prepare to go on an exciting exploration. The blades of grass joyfully wiggle in the wind and seem to be excited about your visit. But be careful, some animals in the meadow might be a little shy. The flowers that greet you on your journey release a wonderful summer scent that can only exist on this magical meadow. Are you ready for the adventure?

Puzzels

Who chirps above the meadow or inside the meadow?
Which creature can hum diligently, search for nectar, and visit the blossoms of the meadow?
Who flutters from blossom to blossom, is colourful and loves the warm rays of the sun?
Who hums and is heavier than a bee?
Who can quickly hop from one blade of grass to another?
Who sneaks and slithers mysteriously in the litter layer of the meadow?
Which creature digs and burrows in the ground of the meadow?

The floors of the meadow

The children's auditory perception becomes more focused when the teacher plays an audio file with meadow sounds during storytelling. At the end of the story, the children guess what kind of meadow animals could be hiding behind one of the described animal noises. The puzzle questions are designed so that the children are indirectly confronted with the floors of the meadow. ("I sneak through the grass and the leaves of the meadow..."). It is expected that they will name several animals for one sound, for example, not only the mole but also the mouse for "digging". After the round of puzzles, the teacher explains that the meadow can be compared to a house and opens a round of questions about the different floors of the meadow.

Game Phase I: Synthesis

For working through the topic, children are divided into groups of three or four and need space about 80 cm x 40 cm. Each group gets the meadow image and the Synthesis Game as detective per-work. The descriptions of habitats are formulated in such a way that children themselves find out which animal fits a habitat. Each child should read one of the descriptions aloud so that the others in the group can listen and think along.

Game Phase II: Movement

The children form a circle in the classroom. A picture of a spider is placed in the middle of the circle. The teacher begins a meadow story with an exciting introduction. The children now literally spin the story further: They throw a woolen ball at each other and hold the loose end of the wool with one hand before throwing it on. This creates a spider web. When throwing, the respective child says a sentence that fits the meadow story. The next child freely extends the story. It should be noted that in addition to the introduction and the main part, an ending should also be invented.

Exploration and discovery

The teacher explores a meadow near the school with the children. There, each child chooses a place and observes the animals and plants uncontested.

End of the lesson

Subsequently, the children's observations and perceptions are shared and exchanged in a circle. The observation cards serve as a memory aid. At the end of the lesson, children are allowed to try (meadow) honey, which the teacher brings as a surprise. A cool herbal tea also lets the children experience the meadow through the sense of taste (Moser, 2022, pp. 16–18).

6. Conclusion

"Play" in child development represents a central and natural activity form, agreed upon by medical professionals, psychologists, and educators. When we look at a child's competence and personality development, we find that

in the area of sensorimotor, emotional-affectionate, cognitive, linguistic, and social development, children make enormous competence progress through playing. In play, children concentrate their attention on shaping, experiencing sensory experiences, social and imaginative roles, dealing with the environment or the novelty factor of the joyful activity that is currently taking place. The urge to play and the joy of playing do not diminish in primary school children. However, the interest in play, the form of play, the complexity, and the child's behavior change. Applying play as a method of subject learning represents an almost insoluble situation for some teachers. However, the apparent tension between play and learning lies in understanding the didactic inclusion of both procedures. Lesson planning is done in practice as planning of lesson units in which teachers choose several lessons that encompass a thematic sense unit while aiming for competence development according to Curriculum21. Teachers make decisions about which subject-related competences are to be focused on and how these are to be achieved and operationalized. In order to achieve sustainable subject-related and cross-disciplinary success, it is necessary to foresee instructional formats such as cooperative learning, project work, discovery learning, experiential learning and problem-based learning as a framework for playful learning. The "game" offers a flexible method for the teaching practice in primary school, which can contribute to a high degree of motivation, increased attentiveness and a positive learning orientation of the students in dealing with the school and world knowledge, which can be integrated into the thematic instruction units or can represent individual instruction sequences. A playful teaching in the primary school creates not only a positive, relaxed atmosphere, but also gives the children the freedom to move, to speak, to listen, to look, to imagine, to think, to retain, to remember, to feel, to shape and to experiment. In a playful way, the students become aware of the topic in the lesson, testing their existing knowledge structures against the new or unfamiliar, constructing new knowledge fields, making independent decisions, arguing, doubting, justifying, defending, discovering solutions and applying them sustainably. Thus, the passage from the playful experience of the world of the child to the complex structured view of the world of the adult is not a contradiction in itself, but a prerequisite for successful playful learning as an exploratory, imaginative, reflective and communicative activity of the students. The core area of

playful learning is the area where the game and knowledge acquisition are the closest associated: the area of experiential learning. Playfully learned, the content of the mind becomes a lively memory. This process of "beaming" the knowledge into the mind is supported by positive emotions, which occur when winning a game or during a breathtaking adventure game, guessing a difficult riddle or an unexpected event in the story game. Playful learning always means experiential learning; it can take up impulses from the social, physical and emotional-affective sphere of children and incorporate them into an active teaching-learning process. For the successful use of games as a method in the primary school, the teacher must create a learning environment that is perceived by the children as inviting and stimulating and allows for playful access to learning, where the boundaries between compulsory and voluntary, between leisure and learning and between playing and working are fluent. Consequently, the teaching plan should include teaching concepts that are designed in such a way that there is enough space for changes and surprises in the progress of a game. The plan should work without time pressure, since the game develops its own dynamics, requires the skill of dealing with mistakes, mishaps, defeats and conflicts in the game and the social and emotional competence for teamwork. The teacher supporting the students in the game should be characterized by an accompanying, moderating and not a dominant-controlling behavior. The more freely the game process can be designed, the more creativity, imagination and inventiveness can be brought in by the children into the game. However, not every game is suitable for integrating thematically into teaching. A game-based instruction requires the teacher to be skilled in reviewing existing games for their appropriateness as a teaching method, perhaps also in modifying them, and then carefully integrating them into teaching on the basis of the curriculum and the teaching assignment. (Moser, 2023, pp. 30–38). The game must be interlinked with the objectives of the instruction in such a way that it enables a learning process and does not remain just a recreational activity. It is important that the initiators of game-supported teaching are aware of its limits. Not every topic, not every child, not every social composition of a learning group, not every classroom situation is suitable for a playful approach. Likewise, not every game is suitable for every child, because children have different preferences and talents. Therefore, it is necessary to employ a variety of different

types of games in teaching. Thus, in a board game, children can practice strategic thinking, in a guessing game they can train their memory, in a movement game they can discharge their urge to move and in a computer-assisted learning game they can acquire knowledge about different facts in a fun way.

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