Play is Serious Work! Play Didactics for the Development of Life Skills

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Abstract

The concept of the game is laden with ambiguity and multiple facets: For a planet with a hundred faces such as the game, it would be risky, to say the least, to attempt the cropping of an entire image, of a single frame. Such an interpretative approach would open the doors to superficial and undue generalizations (Frabboni et al., 1989, p. 9). According to historian Johan Huizinga, play in human history responds to two fundamental principles: freedom, whereby a game is first and foremost a free act. Commanded play is no longer play. At most, it can be the compulsory reproduction of a game (Huizinga, 1938/2002, p. 12) and the principle of pleasure attached to it. Based on these two principles, a third follows: play is autotelic, whereby the end of the play is within the play itself. But if for some, especially in the relatively distant past, games were not created to educate, but only to amuse, to engender sociality and participation, for scholars of child psychology - and not only - such as Piaget, Winnicott, Bruner, Mead, Vygotskij, Montessori, to name a few, it plays a fundamental process in that it is the means for the intellectual, affective and relational strengthening of the child. If one were to define play, one could say that it is a phenomenon rooted in the biological and psychic life of every human being, since it is both an amusement in itself andserious work. To use Maria Montessori's words, it could be defined as "serious fun", a fundamental activity for children (not an ordinary pastime that serves to learn, have fun, explore, relate, get rid of nervous tension, anxieties and emotions such as anger, fear, and so on . Play is not ordinary or real life. It is a departure from that, to enter a temporary sphere with a purpose all its own (Huizinga, 1938/2002, p. 11); it is not, therefore, difficult to imagine the enormous potential of play where the child experiences a realistic but protected dimension in which he or she can experience reality by pretending and thus train for real life. In the light of these premises, playful activity, whether free or structured, solitary or in a group, leads the child above all to learn knowledge, skills, and behaviour in formal and informal environments: at home, in the street, in the gym, at school, anywhere. In the pedagogical and didactic sphere, it is emphasized that play can be a tool capable of developing increasingly intentional, targeted, and constructive transversal skills (Bondioli, 2002) thus activating an early educational-didactic approach to play, which offers teachers the possibility of opening up for all children a pathway to accompanying personal and social growth according to a renewed educational principle that goes beyond the affirmation of both the traditional values of tolerance and coexistence and the new values of recognizing identities and respecting differences (Chiappetta Cajola, 2013, p. 56);. At the same time, play enables children to learn more easily. It is, in fact, undeniable that pupils perceive many of the tasks related to formal learning as boring and tiring. Harnessing the power of play for educational purposes, irrespective of the type of game (for example serious game, motor game, board game, role-playing game, and so on.) and how it is experienced, certainly helps the child to learn while having fun, to greater involvement, increased attention and, why not, to better performance. This contribution aims to emphasize the importance of play didactics in the primary school segment, to analyze the functions of play for educational purposes, and to show, through the best practices experienced by students of Primary Education, how play didactics are fundamental in building life skills.

Play is a Multifaceted Phenomenon Rooted in Everyone's Biological and Psychic Life

Reflecting on such a multifaceted phenomenon as plat requires a vision that considers a plurality of approaches: pedagogical, didactic, psychological, anthropological, ethnographic, kinesiological, psychiatric and so on; a single definition can be criticised for reductionism. We can certainly assert that playful activity, whether free or structured, solitary or in a group, also has an important role on the psycho-affective level in that it allows one to experiment with symbolic and imaginative thought (Bobbio &, Bandioli, 2021), also performing a cathartic function of connection, comfort, and humanization of a relationship (Bateson, 1996), leads the child to acquire knowledge, skills and behaviour in formal, non-formal and informal environments: at home,

on the street, in the gym, at school, everywhere. Playful activity is a phenomenon rooted in the biological and psychic life of every human being; its origins, as testified by archaeological findings, as evidenced by archaeological findings, coincide with the appearance of man on Earth. The instinct to play, regardless of age, is common to all human beings, wherever they live on the globe and whatever degree of culture they possess. It constitutes the first way in which we interact with the world. From the very first weeks of life, the child touches, moves, throws, picks up, and manipulates in many different ways, everything around him/her, which is an amusement in itself and, at the same time, a serious job - to use Maria Montessori's words. This could be defined as "serious fun", a fundamental activity for children and not a common pastime that serves to learn, have fun, explore, relate, get rid of nervous tensions, anxieties and emotions such as anger andfear.

According to Johan Huizinga, play in human history responds to two fundamental principles: freedom, whereby a game is first and foremost a free act. Commanded play is no longer play. At most, it can be the forced reproduction of a game (Huizinga, 1938/2002, p. 12) and, at the same time, the principle of pleasure is attached to it. Based on Huizinga's two principles, a third follows: play is autotelic, whereby the end of the play is within the play itself. The game is not ordinary or real life. It is a moving away from that, to enter a temporary sphere with a purpose all its own (Huizinga, 1938/2002, p. 11); it is therefore not difficult to imagine the enormous potential of play where the child experiences a realistic but protected dimension in which s/he can experience reality by pretending to and thus train for real life.

But for some scholars, especially in the relatively distant past, play did not come into existence to educate but only to entertain, to create sociality and participation, for Piaget, Winnicott, Bruner, Mead, Vygotskij, Montessori, to name but a few, it is fundamental for cognitive development and in particular for the strengthening of essential cognitive skills, such as working memory, attention and problem-solving abilities (Diamond, 2013), but also for the child's emotional-affective, motor and social development; a means of learning while having fun.

Playful activity is indeed fundamental for the development of various competencies and skills, primarily social ones. In play contexts, children learn to collaborate, negotiate, and resolve conflicts, outlining the foundations of their social interaction. Social interaction during play promotes the development of empathy and interpersonal relationship management, which are crucial skills for everyday life (Pellegrini, 2009). Numerous studies have also shown that team play increases a sense of belonging and fosters an understanding of the importance of teamwork (Rubin, Bukowski, & Parker, 2006).

Play also contributes to the development of emotional competence. It allows children to explore their emotions in a controlled environment, enabling them to develop skills in emotion management and empathy. Symbolic play, for example, engenders the exploration and understanding of complex emotions and feelings, providing a "safe ground" in which the child can experience and master emotional expression (Hirsh-Pasek & Golinkoff, 2008). Hurwitz (2003) also argues that play helps children develop a deeper understanding of their own emotions and those of others, thereby promoting more positive social relationships and greater emotional resilience.

Motor development is also boosted by involvement in play activities, as physical play encourages children to explore their physical limits and improve their motor skills. Playing outdoor or movement games helps develop coordination, balance, and physical strength, all of which are essential for healthy growth (Ginsburg, 2007). Playful activities also help prevent child-hood obesity and promote an active and healthy lifestyle, which is crucial for psycho-physical development.

Playful activity, in various forms, is a powerful tool for facilitating the learning process. Several educational theories and a wide range of research support the use of play as an effective learning tool.

Regarding the correlation between playful activity and cognitive development, the scholars who first critically analyzed this relationship include Jean Piaget and Lev Semënovič Vygotskij: the former argued that play allows children to assimilate knowledge and acquire new cognitive skills as, during play activities, children are exposed to abstract and complex concepts, which they elaborate through practical interaction with their environment; Vygotskij, on the other hand, highlighted the importance of symbolic play as a means for the development of language and critical thinking, stating that

play is the ideal context for exercising and developing higher cognitive skills such as problem-solving and critical thinking (Bodrova & Leong, 2003).

Numerous studies show that executive functions such as working memory, inhibitory control, and cognitive flexibility are strongly influenced by playful activity, in particular by regulated play, which requires children to follow the rules and manage their behavior according to goals. Diamond and Ling (2016) point out that structured play – role-playing or games with rules – supports the development of these functions as it encourages children to plan their actions, monitor results, and modify their strategies. These executive skills prove to be essential for academic success and long-term learning.

In addition to improving executive functions, play has been shown to have a significant impact on the development of critical and creative thinking. Russ and Wallace (2013) point out that imaginative play allows children to explore hypothetical scenarios, develop problem-solving skills, and increase their mental flexibility. The opportunity to explore different solutions and try new strategies without fear of failure provides a safe learning environment that enhances creativity and the ability to think outside the box. Recent studies using neuroimaging techniques have also shown that playful activity affects brain plasticity, particularly in the prefrontal areas, which are responsible for executive functions and emotional regulation (Pascual-Leone et al., 2015). These studies show how playful activity, by stimulating the release of neurotransmitters such as dopamine, creates a favorable neurological environment for learning, improving mood (Panksepp, 2007) as well as the formation of new synaptic connections, which underpin memory and learning (Montgomery et al., 2020).

By stimulating the production of oxytocin – a neurotransmitter that promotes attachment and social relationships – play facilitates learning through a sense of belonging and mutual trust (Feldman, 2012). In this way, play contributes to a more inclusive school environment where children feel supported and encouraged to express their potential without fear of judgement.

Playful Activity as a Viaticum for Developing Life Skills in Primary School: Some Best Practices

In the pedagogical and didactic sphere, it is emphasized how playful activity, which has always captured and kept the child's interest alive, can be a tool capable of developing increasingly intentional, focused, and constructive transversal skills, and not only: as Bruner maintained, play is an indispensable training ground for creating new behavioural combinations, it is a combinatory activity that allows the child to see a situation and solve a "problem" in a creative and divergent manner, seeking alternative and never univocal solutions. Play can serve as a vehicle for teaching the nature of a society's conventions, and it can also inform about the nature of convention itself (Bruner, 1962/2005, p. 50).

The role of play in education – first in pre-school and then in primary school – has been recognized progressively as fundamental, since play not only makes learning more enjoyable and engaging but, as mentioned above, promotes the overall development of the child in a holistic and synergetic way, also fostering the development of essential cognitive, social and emotional skills. At this age, play constitutes a particularly important teaching tool since it respects children's learning rhythms and helps them explore complex concepts in an accessible and intuitive way, experiencing and learning skills that are crucial for their growth paths, such as self-regulation, problem-solving and collaboration with peers (Pellegrini, 2009).

Integrating play into education also allows for a less structured, flexible, and more inclusive learning environment, where children feel free to make mistakes and explore new solutions, thus fostering the building of cognitive autonomy (Zosh et al., 2017). Play itself becomes a problem-solving practice, where children learn to manage their cognitive resources and actively seek information to solve problems autonomously; it also lowers barriers, encourages active participation without fear of judgment (Hirsh-Pasek & Golinkoff, 2008), and facilitates the integration of students with special educational needs, providing opportunities for participation as they do not necessarily require advanced language or cognitive skills. Through play, even children with learning difficulties or from disadvantaged socio-economic backgrounds can experience success and improve their self-esteem. An in-

clusive play environment encourages collaboration and mutual respect and facilitates more participative and less competitive learning, where each child can express his or her potential.

Play-based teaching in primary schools is, therefore, particularly effective in fostering the acquisition of transversal competencies (life skills) and in improving student engagement and motivation. According to the World Health Organisation, life skills include skills such as problem-solving, emotion management, effective communication, and critical thinking. These skills, which are essential for personal success, are learned in a meaningful and lasting way through methodologies that foster active and engaging learning, just as in play-based learning. Italy, through Bill no. 2493/2022, and Europe, with the framework of key competencies for lifelong learning defined by the European Parliament and the Council of the European Union (Recommendation of 22 May 2018), place the importance of acquiring these skills at the center.

But how can the development of life skills be promoted?

One of the most effective practices for developing life skills in primary schools is the use of educational approaches that emphasize active learning, in which children are the protagonists of their learning process. Active learning stimulates critical thinking and problem-solving through activities such as group work, interdisciplinary projects, and educational games (Hattie, 2009). For example, role-plays and simulations offer children the opportunity to explore real situations in a protected context, developing skills such as decision-making and conflict resolution. Cooperative Learning is another key best practice for developing life skills. This approach promotes learning through collaboration and teamwork, creating an environment where children learn to communicate, solve problems, and negotiate effectively. Structured group activities, such as collective puzzle-solving or collaborative research projects - where each group member plays a specific role - allow children to develop soft skills such as empathy, active listening skills, and conflict management while also experiencing different forms of responsibility and developing a sense of belonging and collaboration.

According to Blum-Ross and Kumpulainen (2019), digital play activities and immersive technologies, such as virtual reality and augmented reality, also facilitate the acquisition of life skills as they allow pupils to explore new worlds, simulate real-life experiences, and experience complex situations in

controlled environments, allowing them to develop problem-solving, emotion management, and cooperation skills. Bergen (2009) also emphasizes how play creates opportunities for creative thinking and conflict resolution, two fundamental skills in everyday life.

Binkley et al. (2012) demonstrated how digital technologies and serious games – games designed for specific educational purposes – can be used to improve pupils' problem-solving skills by providing them with opportunities to tackle complex challenges in safe environments. Learning through play allows children to explore different solutions to problems while improving their critical and creative thinking skills. Banoğlu and Gümüş (2022) also point out that the integration of digital technologies and gamification in primary school can not only improve pupils' digital skills but also promote the development of soft skills, such as collaboration and problem-solving.

From all this evidence, it emerged that in order to acquire and develop life skills, especially in primary schools, it is necessary to experiment with play through active methodologies such as cooperative learning and gamification (Dreimane, 2021), which, through the integration of game elements in nongame contexts, stimulates pupils' active participation and interest in school activities (Malone & Lepper, 2021) but also serious games.

It was therefore decided, during the 2022/23 academic year, to experiment with innovative approaches based on play-based teaching with the 250 male and female students of the third year of the CdL in Primary Education in Bari, who got involved by creating digital games and more to develop certain life skills in primary school pupils that they would then meet in schools during their direct placement.

The students divided into small groups and divided up the tasks and the topics to avoid duplication. Some were responsible for creating digital educational chips, others for dramatization activities and role-playing games, and others for structured and regulated ludic-motor activities revisiting old street games. To be able to experience them during the direct placement, the students linked these activities to one or more disciplines: they, therefore, created obstacle courses with various difficulties and characteristics to be replicated in the gymnasium or the schoolyard, for geography, technology (coding unplugged), mathematics and physical education. The same routes were then built digitally through Scratch and especially ZaplyCode for plugged coding.

Some groups were responsible for creating real games with recycled materials and fun experiments for the science disciplines, while other groups of students were involved in role-playing, inventing fairy tales for Italian, history, English, and civics and then dramatizing them, as Farné emphasizes, children love theatre without knowing that they are doing theatre, without anyone teaching them how to play a part because it is a spontaneous and natural playful dimension (Farné, 2021, p. 70). The students set up dialogues between historical characters from different eras, and from these dialogues, through storytelling (also digital), they invented fantastic stories that they then dramatized.

All these activities, in the following months, were taken back to the host schools to experience them with the pupils. From the questionnaire, administered to the students at the end of the course, consisting of 20 questions, of which eight were open-ended, although not in an analytical manner, it is necessary to highlight that 78% of the students stated that unplugged coding significantly improved problem-solving in primary school pupils; 85% found that role-playing had a strong impact in developing social skills such as empathy and cooperation; 62% rated obstacle courses as very effective in developing resilience and the ability to cope with challenges; 73% of the students found that creating stories and fairy tales improved pupils' communication and creative skills. Although the data collected through the questionnaire reflects the perceived effectiveness of the university students involved in the experience, it is important to consider the limitations of this study, from the analysis of the open-ended responses, it is interesting to note that many students reported examples where children learned to solve problems in groups, strengthening the ability to cooperate and divide tasks to achieve a common goal; several students, on the other hand, noted that involvement in role-playing and storytelling encouraged children to express their emotions and listen to others' points of view, fostering the development of empathy.

In summary, the data collected show that playful teaching practices, both digital and physical, have played an essential role in the development of certain life skills. Undoubtedly, the best practices created offer valuable guidance for teachers interested in promoting a stimulating, inclusive learning environment centered on the overall development of pupils.

Activating, therefore, an educational-didactic approach to play offers teachers the possibility of initiating for all pupils a pathway to accompanying personal and social growth according to a renewed educational principle that goes beyond the affirmation of both the traditional values of tolerance and coexistence and the new values of recognition of identities and respect for differences (Chiappetta Cajola, 2013, p. 56).

References

- Banoğlu, K., & Gümüş, S. (2022). Supporting technology integration in schools. In J. Glanz (Ed.), *Managing today's schools: New skills for school leaders in the 21st century* (pp. 37–50). Rowman & Littlefield.
- Bateson G. (1996). *Questo è un gioco. Perché non si può mai dire a qualcuno «Gio-ca!»*. [This is a game. Why you can never tell someone, "Play!"] (D. Zoletto, Ed.). Raffaello Cortina Editore.
- Bergen, D. (2009). Play is the learning medium for future scientists, mathematicians, and engineers. *American Journal of Play*, Spring, 413–428.
- Binkley, M., Erstad, O., Herman, J., Raizen, S., Ripley, M., & Rumble, M. (2012). Defining twenty-first-century skills. In P. Griffin, B. McGaw, & E. Care (Eds.), Assessment and teaching of 21st century skills (pp. 17–66). Springer.
- Blum-Ross, A., & Kumpulainen, K. (2019). *Enhancing digital literacy and creativity*. Routledge.
- Bobbio, A., & Bandioli, A. (2021). Play and childhood. Theories and educational scenarios. Carocci.
- Bodrova, E., Leong, D. J. (2003). The importance of being playful. *Educational Leadership*, 60(7), 50–53.
- Bruner, J. S. (2005). *Il conoscere. Saggi per la mano sinistra* [On knowing. Essays for the left hand]. Armando. (Original work published 1962]
- Cajola, Chiappetta L. (2013). *Didattica del gioco e integrazione: progettare con l'ICF* [Didactics of play and integration: designing with the ICF]. Carocci.
- Diamond, A. (2013). Executive functions. *Annual Review of Psychology*, 64, 135–168.
- Diamond, A., & Ling, D. S. (2016). Conclusions about interventions, programs, and approaches for improving executive functions that appear justified

- and those that, despite much hype, do not. *Developmental Cognitive Neuroscience*, *18*, 34–48.
- Dreimane, S. (2021). Gamification before its definition—An overview of its historical development. In L. Gómez Chova, A. López Martínez, & I. Candel Torres (Eds.), *INTED2021 Proceedings* (pp. 7187–7193). IATED Academy
- Farné, R. (2021). Teatro, infanzia, educazione [Theatre, childhood, education]. *Encyclopaideia*, 25(61), 67–79.
- Feldman, R. (2012). Oxytocin and social affiliation in humans. *Hormones and Behavior*, 61(3), 380–391.
- Frabboni, F., Garagnani, W., & Guerra, L. (1989). *Mi presti quel giocattolo? La ludoteca come risorsa educativa* [Can I borrow that toy? The toy library is an educational resource]. Juvenilia.
- Ginsburg, K. R. (2007). The importance of play in promoting healthy child development and maintaining strong parent-child bonds. *Pediatrics*, 119(1), 182–191.
- Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement.* Routledge.
- Hirsh-Pasek, K., & Golinkoff, R.M. (2008). Why play = learning: A challenge for parents and educators. In D. G. Singer, R. M. Golinkoff, & K. Hirsh-Pasek (Eds.), *Play=Learning: How play motivates and enhances children's cognitive and social-emotional growth* (pp. 3–12). Oxford University Press.
- Huizinga, J. (2002). Homo ludens. Einaudi. (Original work published 1938)
- Hurwitz, S. C. (2003). To be successful. Let them play! For parents particularly. *Childhood Education*, 79(2) 101–102.
- Malone, T. W., & Lepper, M. R. (2021). Making learning fun: A taxonomy of intrinsic motivations for learning. In P. K. Lippman & M. Hunter (Eds.), *Aptitude, learning, and instruction* (pp. 223–254). Routledge.
- Montgomery, S. M., Johnson, S. P., & Liben, L. S. (2020). The role of play in learning: Implications for the design of learning environments. *Journal of Cognitive Development*, 15(2), 232–245.
- Panksepp, J. (2007). Play, ADHD, and the construction of the social brain: Should the first class each day be recess? *American Journal of Play, 1*(1), 55–79.
- Pascual-Leone, A., Amedi, A., Fregni, F., & Merabet, L. B. (2015). The plastic human brain cortex. *Annual Review of Neuroscience*, 28, 377–401.

- Pellegrini, A.D. (2009). *The role of play in human development*. Oxford University Press.
- Rubin, K. H., Bukowski, W. M., Parker, J. G. (2006). Peer interactions, relationships, and groups. In W. Damon, & R.M. Lerner (Eds.), *Handbook of child psychology: Social, emotional, and personality development* (Vol. 3, pp. 571–645). Wiley.
- Russ, S. W., & Wallace, C. E. (2013). Pretend play and creativity: Examining a link through the lenses of Vygotsky and Bakhtin. *Journal of Research in Childhood Education*, 27(2), 241–257.
- Zosh, J. M., Hopkins, E. J., Jensen, H., Liu, C., Neale, D., Hirsh-Pasek, K., ... & Whitebread, D. (2017). *Learning through play: A review of the evidence*. LEGO Foundation.