

More Than Just Learning Games. For a Sound and Effective Pedagogy of Play

Roberto Farnè, Università di Bologna, IT

Abstract

One of the most interesting and at the same time intrusive modalities of the pedagogical valorisation of play in the modern age has been found in the forms of “didactic games”. Intriguing because it is in this direction that the research and production of play materials has developed with the aim of strengthening the link between play and learning: the ancient Latin expression *Ludendo docēre*, dating back to Marcus Fabius Quintilianus (1st century AD), is transformed into *Ludendo discēre*, shifting the centrality of the function of teaching to the more natural one of learning. This is disturbing because the expansion of the market for the production of educational games over a period of about two centuries has led to a de facto colonisation of the pedagogy of games, which raises a prejudicial question: on the basis of what assumptions can a game be defined as “educational” and, by extension, which games are “educational”? A game that is labelled as “educational” or “didactic” would then be considered to have some kind of “added value”, making it suitable to be used in schools. But is this really the case? How many of us would include educational games in our ludo biography, among the games that have contributed the most to our education? It is likely that there is an unresolvable conflict of interest in the relationship between school and play.

1. Playing to Teach

Linking pedagogy to play may sound like an oxymoron to those who see pedagogy as a science of education in a directive sense, based on precise guidelines or programmes. Sue Rogers (2011), indeed, in her essay, speaks of

a real “conflict of interests”, to the point of asking: “What kind of pedagogy is a ‘pedagogy of play’?” (p. 5), since the two terms refer to very different domains: pedagogy denotes an educational action designed by adults and oriented towards specific goals, while the word play refers to a wide range of activities and modes of interaction that have freedom as their essential principle. The widespread phenomenon that Rogers defines as the “pedagogisation of play”, if on the one hand it has the characteristics of the recognition of play as an educational tool, on the other hand it is resolved in the absorption, in the colonisation of play by pedagogy. Gianfranco Staccioli (2008) speaks of a “confiscation”, whereby the “conflict of interests” seems to be resolved, but in fact it is not.

One answer may be to consider this conflict as somewhat intractable: the two fields respond to different demands, and it is good that they stay that way, allowing for mutual influence and contamination. Sue Rogers proposes a reciprocal relational approach, a process of co-construction in which play also has the task of formally inhabiting education, to the point of defining some of its characteristics. In short, a kind of education played on equal terms.

Since the 17th century, two different orientations have developed in the field of play pedagogy. The first is based on play as a functional tool for learning processes. This model, based on the well-known principle of “*ludendo docere*”, was already known in ancient times. A classical point of reference is the *Institutio oratoria* of Marcus Fabius Quintilianus (1st century A.D.). That is, to make the activity of teaching enjoyable and to eliminate as far as possible the burden of suffering that it entails, has been an intuition since antiquity, aimed not only at improving the quality of learning but also at redefining the identity of the teacher.

In the modern era, this idea leaves the purely theoretical sphere and describes psychological and didactic procedures, tools and techniques. John Locke, in his work *Some Thoughts Concerning Education* (1693/1989), describes the possibility of designing and using toys as a means of making education enjoyable: “There may be dice, and playthings, with the letters on them, to teach the children the alphabet by play; and twenty other ways may be found, adapted to their particular temperaments, to make this kind of learning a sport to them” (p. 209).

In the mid-eighteenth century, the English cartographer John Spielsbury produced a dissected map for educational purposes. He glued a map of Europe to a wooden board and cut it into the various states, following the contours. The child would then have to reconstruct the map by putting the various pieces back together again. This was the birth of the jigsaw puzzle as a didactic game. It would later become extremely popular in its various versions. At the same time, especially between the 19th and 20th centuries, the “goose game”, which originated in Italy and then spread to European courts, became a format on which many educational games were based. The dice are rolled over a kind of “curriculum”, which can be historical, geographic, scientific and so on, which the child has to go through and follow, stopping at the different boxes and learning the contents by heart. Even today, the Goose Game scheme continues to be used to create pathways on current topics with educational purposes (Farné, 2019).

Manual dexterity, logic, aesthetics and visual construction are the most obvious features of the pedagogy of play contained in Friedrich Fröbel's *Gifts*, which became a kind of play matrix suggesting the production of large-scale games characterised by three-dimensional geometric pieces with which to build imaginative constructions (Brosterman, 1997).

Montessori materials have a different focus, which is on the practice and development of specific skills and sensitivities in the child. Montessori does not really speak of playing, but of the child being pleasantly attracted to the materials with which he or she interacts, “as if” it were playing. By “playing” with these rigorously structured materials, children think, make hypotheses and propose solutions which they immediately verify. Play encourages them to solve problems, to use the trial-and-error method, to classify, to acquire information. For Montessori, play is the work of the child, in the sense that the child plays where it finds activities in which to invest its energy, because it is moved by an interest, by the need to do something (Montessori, 1948/1999).

It is along these lines that the children's museums have come into being: the most structured and spectacular expression and extension of a pedagogy of play that developed during the 20th century, first in the United States and then in various countries around the world. Children's museums are institutions that are dedicated to putting into practice the principle of learning through play. They are characterised by different environments, each of

which has a theme (media, water, construction, electricity, printing, food, etc.); children have a particularly evocative “learning environment” with exhibits, i.e. tools, equipment, materials related to the theme, with which they are invited to play, simulate, build.

Based on the hands-on approach, i.e. the touching of things (the opposite of traditional museums, where the principle is “look and don’t touch”) and the learning by doing, on which active education is based, children’s museums promote informal learning by stimulating the child’s curiosity to manipulate, discover, make and unmake, thus promoting the idea of play, which is the primary source of knowledge in childhood and which, according to Montessori, goes far beyond games in the strict sense of the word: it is learning by direct contact with things, self-learning.

“Edutainment” is a neologism born out of the crisis between education and entertainment. It describes a wide range of multimedia products that make the child’s playful activity not only fun, but also “productive” in an educational sense. A few years ago, the slogan of a large Italian toy industry was “Toys are food for thought”. Turning on a computer screen for a child today means entering a “playground” where countless play scenarios can be opened up, whose limits are not objectively measurable, or an immense virtual toy library where one can find the most verisimilar and the most far-fetched simulations.

The ancient principle of the *ludendo-docēre*, the truth of which is so generally exhortative that it is ultimately inconsistent at the level of pedagogical concreteness, is more appropriately redefined in the *ludendo-discēre*, thus placing the emphasis on the human activity that, in its natural state, is most likely to take on ludic characteristics: that is, learning more than teaching. Learning enjoys a freedom and autonomy, as well as a biological basis that does not necessarily make it dependent on teaching, since the subject is naturally predisposed to learning by itself, in relation to the world, as an act of original intentionality.

2. Play as Anti-Pedagogy

This leads us to the other pedagogy of play, which stresses the ludic character of learning, the foundations of which are natural: the need to explore and to know, curiosity as a driving force, the desire to do and to experiment. This pedagogy of play has its reference point, which can be read as “anti-pedagogy”, in Jean Jaques Rousseau’s *Émile* (1762/1979). Here, as the natural field of experience in which the child builds the foundations of all its knowledge, play becomes, in a sense, the paradigm of education. Play itself is an educator. Rousseau’s “paradox” is that nobody teaches children how to play, but it is through play that children develop their skills and knowledge. The adult should therefore do nothing more than “let the child play” in the most natural conditions, those that allow him to interact with the environment and its raw and natural elements through his body and movement, his senses, exercising his manual dexterity, imagination and intelligence. Rousseau expresses this with the concept of “negative education”, an education that involves the least possible intervention of direct and formal instruction. He argues openly against those who, like Locke, try to make children learn by means of playful teaching methods and various tricks:

A great business is made of seeking the best methods of teaching reading. Desks and cards are invented; a child’s room is made into a printing shop. Locke’s want him to learn to read with dice. Now is that not a clever invention? What a pity! A means surer than all these, and the one always forgotten, is the desire to learn. Give the child this desire; then let your desks and your dice go. Any be good for him. (Rousseau, 1762/1979, p. 117)

Rousseau’s pedagogical provocation for the affirmation of the centrality of play in its natural expression and development is: “Dare I reveal to you the greatest, the most important, the most useful rule of your education? It is not to gain time, but to lose it” (p. 93). Yet how often has the child’s play arrived at the age of school and its pressing obligations been seen as a useless, unproductive “waste of time”?

Children’s play is all the richer as a formative activity the more the child can exercise it outside of any predetermined superstructure, in a space that

is as natural and free as possible. This space is filled by the child on the basis of his or her own playful project, using his or her imagination and the activities that his or her relationship with the environment suggests to him or her (Gill, 2021; Gray, 2013). The materials for play can be those of the environment itself, preferably natural ones such as water, earth, wood, stones, etc., or everyday materials that are recycled to be manipulated and transformed during play. Rousseau gives us one of the clearest examples of this approach when he states that the novel *Robinson Crusoe* will be the only book that Émile will have at his disposal, so that he himself will play at being like Robinson, imagining that he is on a desert island where he has to provide everything he needs for life and defence. His game will be one of searching and building (a hut, clothes, tools...), thinking about possible dangers and how to deal with them, experiencing adventures in fantasy but through concrete things that he will bring to life with his skills and imagination.

According to this model, the teacher doesn't "force" the child to "play", but rather offers the child a space, time and materials with the least amount of superstructure, allowing the child to fill in and shape the games according to their own active imagination. This means that it is up to the adult to create the minimum and essential conditions, the attitude and the methodological framework within which the child can operate, not following the path of a pre-determined play, but on the basis of his own playful intention. It arises from the naked and raw relationship with reality and its material equipment, whose apparent poverty is the condition of its richness, since it is ready to support a strong investment by the child.

In this way, a natural pedagogy of play begins to emerge, a holistic vision that places the child's intelligence in a close relationship with the body, with movement, with the senses. The child's freedom, no matter how "controlled" it may be by the adult, is the necessary condition for the child's play to nurture the psychomotor and intellectual capacities that lead to curiosity and questions that become knowledge. Knowledge, learning in childhood should not precede experience. It should not be independent of it.

3. To Play Means to Move

The question to be asked is this: when we talk about play and education, play and learning, which orientation are we referring to or tending towards? The first is the design and production of play equipment that is technologically advanced and highly interactive, and the second is the centrality of the body and motion, of play based on the naturalness of environments and materials, and the effortlessness that accompanies them.

An overly schematic division, one might say, a good play pedagogy should use both, everyone agrees, and the discourse would end there. However, if we look at the prevailing ludic culture, it is now the one that is oriented towards the first model: the idea of making didactics “ludiform”, to use the effective expression coined by Aldo Vsalberghi (1988), makes effective use of technological apparatuses (interactive whiteboards, tablets, etc.), where forms of digital game-based learning or so-called gamification seem to be winning (Andreoletti, Tinterri, 2023; Fioretti, 2023). We have not yet found any scientific research showing that a school equipped with technology and oriented towards techno-game practices produces learning results and expresses an overall pedagogical quality superior to a school of the same level without these characteristics. In other words, we believe that technological environments and means can stimulate in students a desire to learn that they would not normally have, or that the teacher would not be able to stimulate through his or her own personal teaching skills.

The fact that there are machines and devices that are designed to facilitate learning, even in playful forms, is nothing new and is fine, provided that we know that it is a game that is in line with what the school wants to achieve, that it is designed to achieve its own didactic goals, which are prescriptive, in other words, it is a sterilised game. To be present in the school, play cannot bring into play the school itself in its institutional assumptions, starting from spaces and times, from the very concept of the curriculum, which does not belong to the sense of the game.

The reason why, between the two orientations of play, the former can usually find a place in the school, but not the latter, is precisely this: because there is nothing natural about the school; the school is a great artifice, one of the most powerful inventions of modern Western culture. School is a “great ma-

chine”: *Didactica magna* is the title of the work of Comenius who, in 1657, built the model of the modern school, designed to make the process of teaching and learning effective and scientific for everyone.

I would now like to make a short digression. Research in the field of neuroscience tells us that the development of our brain, and of the nervous system in general, is primarily functional for the organisation and management of actions, and not for the accumulation of knowledge. Fausto Caruana and Anna Borghi, in a lively book titled “The Brain in Action”, report on research on ascidians, a type of marine animal that can be compared to sponges. Born with a very simple brain and nervous system, they are light-sensitive and move around looking for a place to settle (a rock, a reef). As soon as they have found a place, they attach themselves to it and stay there for the rest of their lives. At this point, the two scientists explain, the ascidians “undergo a metamorphosis: as soon as they stop moving, they begin to absorb and reabsorb their brains. Without motion, perception becomes an unnecessary expenditure of energy”. The conclusion is that if we did not have a motor system, not only would there be no point in perception, there would also be no point in thinking (Caruana & Borghi, 2019, p. 13).

So the question is: Is a “school” that keeps children sitting for a large part of its time, even with the use of sophisticated and suggestive techno-game devices, convinced that it is developing the intelligence of these children, or is it rather unaware that in addition to the static nature of their bodies, their brains are also static? Receptive, but not necessarily active.

A century ago, in Calais in 1921, the *Manifesto of the Active Schools* defined what the sciences of education had been working out (Lucisano, 2021). The references were to Dewey, Montessori, Piaget, Claparède, etc. Play, motor and sports activities, crafts and open-air activities have become an integral part of this new education, which, in addition to quality learning, aims to create active citizens and a culture of peace. Nowadays, those who are preparing to become teachers study and pass exams on this scientific knowledge, on the importance of play and active didactics, but then, when they enter the school, they do not apply it and adapt themselves to the practice of a school pedagogy, even if it is technologically advanced. We could speak of a “counterfactual pedagogy” (Farné, 2022). As if a doctor, trained and specialised in medicine and surgery, treated his patients with bloodletting and enemas.

So the “conflict of interests” between play and pedagogy in schools is not resolved by games, but by the “sense of play”, the culture of play that the teacher either has or does not have, like the question of Don Abbondio’s courage in the Italian novel *I promessi sposi*: when Cardinal Borromeo asks him why he did not unite Renzo and Lucia in marriage and reminds him of the courage needed to carry out his function, the poor priest replies: “Courage, if you do not have it, you cannot give it.” That is to say, in conclusion, that courage is not needed to introduce a little technology or ludic strategies into the school. It is needed to bring in a culture of play, a sense of play, which can transform, to some extent, the experience of teaching and learning.

References

- Andreoletti, M., & Tinterri, A. (Eds.). (2023). *Apprendere con i giochi. Esperienze di progettazione ludica* [Learning with games: Game design experiences]. Carrocci.
- Brosterman, N. (1997). *Inventing kindergarten*. H.N. Abrams.
- Caruana, F. & Borghi A. (2019). *Il cervello in azione* [The brain in action]. Il Mulino.
- Farné, R. (2019). *Abbecedari e figurine. Educare con le immagini da Comenio ai Pokémon* [Alphabets and stickers. Educating with images from Comenius to Pokémon]. Marietti1820.
- Farné, R. (2022). Pedagogia controfattuale [Counterfactual pedagogy]. *Encyclopaideia – Journal of Phenomenology and Education*, 26(63). <https://doi.org/10.6092/issn.1825-8670/15267>
- Fioretti S., a cura di (2023). *Il valore educativo del gioco. Gamification e game based learning nei contesti educativi* [The educational value of play. Gamification and game-based learning in educational contexts]. Franco Angeli.
- Gill, T. (2021). *Urban playground. How child-friendly planning and design can save cities*. RIBA.
- Gray, P. (2013). *Free to learn. Why unleashing the instinct to play will make our children happier, more self-reliant, and better students for life*. Basic Books.
- Locke, J. (1989). *Some thoughts concerning education*. Oxford University Press. (Original work published 1693)

Lucisano, P. (2021). Scuole nuove o innovazione educativa? A cento anni dal Convegno di Calais [New schools or educational innovation? One hundred years after the Calais conference]. *Italian Journal of Educational Research*, 26, 7–16.

Montessori, M. (1999). *La scoperta del bambino* [The discovery of the child]. Garzanti. (Original work published 1948)

Rogers, S. (Ed.). (2011). *Rethinking play and pedagogy in early childhood education. Concept, contexts and cultures*. Routledge.

Rousseau, J. J. (1979). *Émile, or on education* (A. Bloom, Trans.). Basic Books. (Original work published 1762)

Staccioli, G. (2008). *Il gioco e il giocare* [The game and playing]. Carocci.

Visalberghi, A. (1988). *Insegnare ad apprendere. Un approccio evolutivo* [Teaching to learn: An evolutionary approach]. La Nuova Italia.