The Role of Play in Children's Cognitive and Language Development

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Abstract:

Play provides opportunities for exploration, experimentation, and manipulation that are essential for constructing knowledge and contributes to the development of representational thought. During play, children examine and refine their learning in light of the feedback they receive from the environment and other people. It is through play that children develop their imaginations and creativity. During the primary grades, children's play becomes more rule-oriented and promotes the development of autonomy and cooperation, which contributes to social, emotional, and intellectual development. Games as rule-governed forms of play can be exploited in second language teaching programs for children which highly invest on the

hedonistic and imaginative characteristics of young learners.

Key words:

play, different categories of play, learning through play, physical and linguistic games in ELT.

Introduction

Play appears to have important implications for all areas of a child's psychological life and it is a mistake to see it as a trivial, time wasting activity. The purpose of play for a child is enjoyment and a child does not consciously engage in play in order to learn something about the outside world or gain experience. A child plays simply because it is fun and if there is any kind of learning, it will be quite incidental.

Childhood should not be considered as a preparation for adulthood: it is an independent phase of life. Play provides a child with opportunities to come up with new experiences which can give a child a sense of delight. Delight, according to Fontana (1995) is a desirable end in itself and it is a mistake to consider it as a diverting factor in pursuits that are more valuable.

Categories of Play

Different scholars have tried to classify children's play in terms of its content. According to Fontana (1995), one of the best known categorizations belongs to Buhler (1935) who categorizes play from a cognitive perspective. He suggests four main categories, namely *functional*, *fictional*, *receptive*, and *constructive*. Functional play involves the practice of a particular function or skill, which is usually relatively crude, such as kicking or clapping hands. Fictional play emerges next, usually during the second year of life, and involves fantasy or pretend behavior in which individuals give a particular role to themselves or objects with which they are playing. At this stage, play has a symbolic nature, which allows the child not only to make increasing use of imagination, but also facilitates the development of language. At the stage of receptive play, the child listens to a story or looks at the events in a picture. Constructive play, which emerges at the end of the second year, involves drawing, playing with bricks, sands, and other natural materials. To these four categories a fifth one called *play with rules* can be added, which involves the set procedures we normally term games, and which usually becomes established by pre-school age.

An alternative developmental categorization proposed by Rubin, Fein, and Vandenberg, (1983) and Bee (1989) includes *sensori-motor*

play, first pretend play, elaboration with objects, substitute pretend play, socio dramatic play, awareness of roles, and *games with rules*. Sensori-motor play occupies the first 12 months of life and involves exploring and manipulating objects; whereas, first pretend play emerges early in the second year. At this stage, the child is beginning to use objects for their typical purpose but in a pretend capacity (e.g. using a toy spoon to feed a doll). The next stage, namely the elaboration with objects allows the child between 15 and 21 months to start relating this pretend play to toys or to other people, rather than just to the self. Two and three year old children are able to use objects to stand for things other than themselves at the substitute pretend play phase; that is, a child uses a wooden block as a car or a plastic bottle as a boat. Socio-dramatic play is usually apparent by age five through which the child takes roles and pretends to be someone else. When, around six years of age, the child assigns roles to others and deliberately plans role-playing activities, s/he is experiencing awareness of roles stage. From seven and eight onwards, children increasingly substitute games with specific rules for pretend play (Fontana, 1995).

Another categorization belongs to Parten (1932) who categorized social aspects of play. Based on her observations, Parten divided the types of children's play into six categories. As she put forward,

children might be either *unoccupied* or an *onlooker* on others' activities. If engaged in an activity, they could be *solitary* or in *parallel* activity with others as when children play near each other with the same materials but do not interact much; i.e. they play independently. Parten referred to children's interactive play as *associative* and *cooperative*, and that is when children complete each other's activities when they are playing. Parten found that the first four categories declined with age, while associative and cooperative activities increased with age (Smith and Cowie, 1991).

The Nature of Play

It is difficult to define "play" and probably that is why it is so widely misunderstood as a merely frivolous, recreational activity. Play, for adults, is recreational, often exhilarating, and certainly not part of the serious business of life (Hurst and Joseph, 1998). However, for children play has a very different meaning, purpose, and significance. The fact is that children's play should be taken seriously.

In trying to restrain the nature of play, researchers and theorists have highlighted the fact that whatever it is, play embraces a great deal of children's activities and behavior, and has different purposes for them at different stages in their development. Therefore, based on his study, Hutt (1966) suggested exploratory play as a precursor to

problem-solving skills. For him, exploration was characterized as relatively serious and focused; whereas, play was characterized as a more relaxed activity which eventually could lead to exploration.

Other theorists have proposed different definitions for play. Piaget (1951, in Smith and Cowie, 1991) described a developmental sequence from practice play to symbolic play to games with rules, though he asserted that these were overlapping stages. Piaget used the term practice play to describe the mastering of actions through constant repetitions. His main concern was sensori-motor play in infants. According to Piaget, the earliest pretend play tends to involve the child directing actions toward him/herself and later on to her toys trying to incorporate others into pretend activities, as well. The role of symbolic and pretend play is crucial in mastering social rules and social conduct particularly when children used puppets in presenting short dramas.

Smilansky (1968) postulated a four-fold sequence from functional play (similar to practice play) to constructive play, then dramatic play and finally games with rules. Socio-dramatic play proposed by Smilansky refers to social interactions, which lead to creation and sharing of rules in imaginatively created situations.

However, in order to define play, it would be more appropriate to adopt an approach that does not take an either/or explanation, but it encompasses several interpretations. Pellegrini (1991) shows how play

can be defined within three dimensions-- play as disposition, as context, and as observable behavior. Play as disposition is to do with children's need to explore, with their intrinsic motivation, with the ways in which they pay attention, and finally with their active engagement and involvement with the world around them. These dispositions are intrinsic to learning, and to children becoming lifetime learners. Their development is also very much dependent on the emotional health of the child, which acts as a springboard for confident exploration and experimentation (Bowlby, 1969; Laevers, 1991, in Hurst and Joseph, 1998). Play as context involves the notion of spontaneity, together with a lack of any predetermined end in mind, and the freedom to choose, initiate, direct, and control one's activities. Play as observable behavior derives from the different stages of play that evolve during early childhood, and that have been identified, in particular, by Piaget (1962) and Bruner (1974). These include the development from sensori-motor to symbolic play and games with rules. While this definition like most others, has its limitations, it gives us a clearer and broader base from which to make decisions about why and how to include play in our educational provision.

Theoretical Background

Theoretical perspectives on the nature of play and on its role in child development cover a wide range. In a comprehensive account, Smith and Cowie (1991) trace back the prominent theories about play to the late nineteenth and early twentieth centuries. One of the theorists whose ideas were influential in the start of the kindergarten and nursery school movement was Friedrich Froebel. "Kindergarten" translates from German as "child garden", and this shows Froebel's ideas about play and child's development: Play, truly recognized and rightly fostered, unites the germinating life of the child attentively with the ripe life of experiences of the adult and thus fosters the one through the other. According to this view, play represents development from within the child, though it can be nurtured by adult guidance and the provision of appropriate materials. Froebel's views gave a positive value to educational significance of play. It opposed the behaviorist views on learning, which encouraged rote learning as the main characteristic of many infant schools at the end of the nineteenth century (Whitbread, 1972, in Smith and Cowie, 1991).

Herbert Spencer proposed a less enthusiastic view of play. He believed play is carried out "for the sake of the immediate gratifications involved, without reference to ulterior benefits" (Smith and Cowie, 1991, p. 180). He suggested that higher animals are better

able to deal with the immediate necessities of life, and that the nervous system, rather than being inactive for long periods, stimulates play. According to Spencer, play is the result of an extra energy, which gives way to superfluous and useless exercise of faculties that have been resting for some time. Spencer's approach has been labeled the "surplus energy" theory by subsequent writers, who traced this theory to the eighteenth century philosopher, Friedrich von Schiller.

Smith and Cowie (1991) further present Karl Groos' criticism of Spencer's theory. Groos argued that surplus energy might provide a particularly favorably condition for play but was not essential. He also thought play had a much more definite function than in Specner's theory. Groos believed that the very existence of youth is largely for the sake of play because play provides exercise and elaboration of skills needed for survival. This has been called the "exercise" or "practice" theory of play and in its modern form it has many adherents.

G. Stanley Hall evaluated Groos' practice as partial, superficial, and perverse on the ground that Groos saw play only as practice for contemporary activities. By contrast, for Hall, play was a means through which children practiced atavisms, going through different stages of human evolution, from chasing and wrestling to using tools. In fact, play allowed children to let out those instincts that

characterized earlier human history. This theory was named as the "recapitulation theory" of play and has had little or no recent support.

Another most distinguished figure in the education of young children is Maria Montessori who, like Froebel, saw the value of self-initiated activity for young children, under adult guidance. She emphasized the importance of learning about real life. Therefore, she advocated constructive play materials that helped in sensory discrimination and in color- shape matching (Smith and Cowie, 1991). She did not value pretend or socio-dramatic play and believed it to be an escape from reality. Hence, there seems to be a slight difference between the Montessori School and Froebel Kindergarten. Montessori believed that children preferred work to play although she gave a new meaning to the child's spontaneous work. As she maintained, children's work differed in quality and motive from that of the adults (Standing, 1962).

Another dominating figure in the domain of child development is Jean Piaget. "Piaget (1962) conceived of play primarily as assimilation; that is, in play, children incorporate stimuli into existing cognitive schema with minimal changes in those schema" (in Pellegrini, 1991, p. 215). He argues that play establishes pre-existing concepts, with minimal accommodation to external stimuli; hence, he finds assimilation prior to accommodation and thinks that children are

constantly adapting reality to fit their own concept of the world. Piaget further believes that child thought is originally and naturally autistic and changes to realistic thought only under long and sustained social pressure. He contends that children's imagination is highly improved in certain kinds of play through their involvement in problem solving. Play, therefore, can be regarded as the manifestation of thought. Up to the age of seven or eight, play dominates in child thought to such an extent that it is very hard to tell deliberate invention from fantasy that the child believes to be the truth.

Another approach to play can be observed in Vygotsky's theory about child development. Play, as he put forward, is the leading source of development in the preschool years. Through play, the child is liberated from situational constrains and tries to fulfill his/her wishes. Vygotsky saw "the affective drive behind play as being the imaginary, illusory realization of unrealizable desires" (in Smith and Cowie, 1991, p. 182). Thus, when children are engaging in play, they are usually close to their optimal level, because the absence of fear of failure does not inhibit them from exhibiting their existing skills and trying out some new ones (Vygotsky, 1967, in Pellegrini, 1991). Moreover, in Vygotsky's theory, culture plays a key role in the child's cognitive development and cultural transmission of knowledge is

possible only through actions, work, play, technology, literature, art, and interactions between the members of a society.

Play is the core of Bruner's theory of child language learning. He believed that when children get involved in playing, they use words and exchange language. They provide the first occasion for the child's systematic use of language with an adult. They offer the opportunity to explore how to get things done with words. Since the words of play are virtually pure performatives, the child can explore the environment and realize that there are different means for reaching one's ends. Bruner believed that each game played by children and their parents can represent a miniature form of life (Bruner, 1983) in which children can improve their problem solving and creativity. He further suggested that play serves both as practice for mastery in skills, and as an opportunity for trying out new combinations of behavior in a safe context (Bruner, 1972, in Smith and Cowie, 1991).

Play and Learning

Many scholars over the years have tended to see play as simply representing the child's method of learning. They identify play as being the innate mechanism that leads children to interact with their environment and thus to learn the way in which it works. Fontana (1995, p. 40) does not find this view "incompatible with the notion that

children engage in play for hedonistic reasons though hedonistic reasons, for the child, are all the matter". In the early months of life, playing does seem to be an innate rather than a learnt activity and can put children in a position in which learning is likely to take place. Play, also, may help children develop more complex forms of thinking as they strive to reflect upon the ways things behave as they interact with them, and can be a stimulator of social learning as children discover what is acceptable, and not acceptable, to the people with whom they are playing.

According to Fontana (1995), the more opportunities a child is offered during the course of play, the more likely it is that new learning will take place. A child growing up in an environment in which there are few objects to manipulate (i.e., there is little access to materials like sand and clay, or construction toys like bricks or drawing materials, or even there is only limited social interaction) will learn less rapidly than one placed in a more stimulating environment. The environment should provide the child with objects that the child is able to explore and use imaginatively, natural materials that can be mixed and shaped and poured without fear of adult outrage at the ensuing mess. In such an environment, the child should be accompanied by a parent who is happy to enter the child's magic world.

If we believe that education is principally promoting the inner resources of children, so that they are soon able to stand on their own feet and make their way in the world with integrity and courage, then, play should be encouraged throughout the early years. The teachers should prepare for the environment and all the special occupations in order to get the children involved in different sorts of activities. Their purpose is to provide children with the kind of experiences that are likely to lead to desirable forms of learning. The task of the teachers is to offer a range of play activities and to help children explore them to the full. Play, is a means through which teachers can encourage children to have creativity and spontaneity while they are learning.

It is worth to mention that children should not be left quite free to do what they wish, but they should be involved in an activity. Sometimes teachers should initiate particular activities with particular children; whereas, at others it entails observing the activities children have chosen for themselves and prompting them to modify and develop these experiences so that they may realize their full learning potential. Montessori maintains that play should pave the way for the spontaneous activity in which the child creates himself (Standing, 1957).

Hence, much of learning takes place through play. It is widely recognized nowadays that play is an important part of the learning

process. Childish games help children to rehearse for the real world and give them an opportunity to try out situations in order to learn to cope with them. Play helps children develop conceptual awareness, physical co-ordination, creativity, and social skills (Reilly and Ward, 1997).

Moreover, children can develop linguistic and cognitive skills through playing. Teachers should encourage children to verbalize what they are doing, to describe their actions, and to offer suggestions on why certain results follow from their actions. By these, children gain ability in using appropriate vocabulary structures and extending their knowledge of how the physical world behaves.

Play and School Related Performance

Aspects of children's play have been correlated with their performance on both cognitive and social measures. In a series of studies, Pellegrini (1991) has found that there are significant relations between preschoolers' cognitive play styles and their classification and spatial abilities. Preschoolers who engaged in functional play, an immature form of play for this age group, tended to do poorly on classification and spatial tasks. Children who engaged primarily in dramatic play, on the other hand, tended to do well both on classification and spatial tasks. Pellegrini, based on his observations,

maintains that children who played at higher levels of the cognitive play continuum tended to score higher on measures of school-related achievement such as reading readiness, school language, and word-writing fluency.

Moreover, Rubin and Clark (1982, in Pellegrini, 1991) studied the relations between play and one measure of cognitive style, i.e., the number of simple and complex blocks constructions. Solitary-functional, parallel-constructive, and parallel-dramatic play tended to relate positively to the building of less-complex blocks structures. Therefore, they concluded that those children who engaged in solitary-functional and parallel play were cognitively less advanced than children who engaged in solitary-constructive play. Research (Rubin, 1982; Rubin and Clark, 1982; Rubin and Daniels-Beirness, 1983, in Pellegrini, 1991) shows that preschoolers tending to engage in functional and parallel play may be at a lower level in terms of their general social competence. According to the findings, preschoolers who engaged in solitary-functional or solitary-dramatic play tended to be unpopular and were rated as hyperactive and anxious-fearful respectively. Parallel-dramatic play also related to children being rated as anxious, fearful, and hyperactive by their teachers. Thus, it can be concluded that there is a direct relation between the type of play

preschool children engage in and their social and cognitive development.

Games

A *game* is basically play governed by rules. For example a little boy is kicking a ball in the house garden. This is not a game; what the boy is doing is play. If the boy kicks the ball with the intention of putting it to a goal, and he has been told to use his feet only, then he is involved in a game. In the former situation, the boy is playing without any given rules, but in the latter, the kicking is ordered by a set of clearly stated rules. A language game, thus, can be considered to be rule-governed, to have objectives, to have a beginning and an end, and to require linguistic supervision of the teacher (Klauer, 1998).

Lee (1988) has published a comprehensive book on how different kinds of language and physical games can be employed in language teaching to all ages particularly children. He argues that the essence of many games lies in out-stripping, in a friendly fashion, someone else's performance, in bettering one's own; that is, outdoing others, and improving oneself. This creates a pleasant, informal, and relaxed atmosphere which can be particularly favorable to language learning. Nevertheless, the case for language is not identical with the case for enjoyment in the language lesson. An entertaining atmosphere, he

maintains, can be achieved by means other than games. The point that has to be unraveled here is the advantage of language learning games over any other kind of entertainment in classrooms.

A lively classroom involves gestures, handling and touching things, incidents, activities, pictures, dramatizations, storytelling, contests, and games. Communicative games, thus, do not have to be lengthy or complex; they only have to be interesting and involve information exchange among students in order to proceed. In this way, games can distract the learners' attention from the study of linguistic forms, since they stop thinking *about* the language and instead find the opportunity to *use* it, receptively or productively. Games, therefore, should not be regarded as a marginal activity, filling in odd moments when the teacher and class have nothing better to do: Playing games should be central to all ELT programs particularly those of children at elementary and intermediate levels.

A summary of Lee's classification of games is presented below:

1. *Structure games*: They require the use of particular patterns of syntax such as a number of guessing games (What is it? Is it ...?, Where is it? Is it behind ...?, etc.).

2. *Vocabulary games*: The learners' attention is focused on words usually indirectly to enhance incidental learning (What's this?, Who's that?, Shopping lists, etc.).

3. *Spelling games*: More appropriate for intermediate levels, they are intended to give learners the correct visual image of words, while raising their knowledge of phoneme-grapheme relations (copying, listening and writing, board games such as Scrabble and Lotto, puzzles, crosswords, etc.)

4. *Pronunciation games*: In these games, learners get a chance to be exposed to the pronunciation of isolated words or stretches of discourse and at the same time find their own difficulties (differentiating minimal pairs, pronunciation bingo, matching pictures with words, etc.).

5. *Number games*: These games help children to get accustomed to the spoken forms of numbers. They are usually played orally, but some may include reading and writing as well (circling a called number on the board, counting the clapping of hands, guessing the number of different items, arithmetical cross-questioning, telling the time, etc).

6. *Listen-and-do games*: Children have to listen and understand, then carry out some action. These games usually focus on spelling, pronunciation, and numbers (performing commands, recognizing true and false statements, telling and retelling stories, matching answers with questions, listening and drawing geometrical shapes, etc.).

7. *Read-and-do games*: Reading games particularly common at early stages of language learning often involve children in some kind of reading in order to play a game. It may start with simple recognition of letters and syllables to words, phrases, and sentences (commands printed on flashcards, matching words and phrases with objects or pictures, rhymes and songs, treasure hunts, scrambled stories, snakes and ladders, etc.).

8. *Writing games*: Children are encouraged to experience writing from its simplest form (i.e., copying) to more meaningful writing practices (assimilating letters to objects and animals, dictation, completing sentences, letter writing, etc.).

9. *Miming and role-play*: These games take children away from their chairs and desks and give them a chance of moving about, as they do outside the classroom. Different kinds of dramatization bring the language to life and give children some experience of its use as a means of communication (guessing mimed actions, performing chain actions, miming songs, using role-cards, etc.).

10. *Language clubs*: In many language teaching schools, there is a voluntary spare-time "Language Club" attended by learners who want to have more of the activities they like such as looking at pictures, reading books, listening to tapes and CDs,

playing games, singing songs, telling stories, and solving puzzles.

11. *Discussion games*: In these games, children are encouraged to involve in long stretches of discourse, making them more appropriate for more advanced children. They all lead to group or pair activity (likes and dislikes, giving advice on different problems, cross-examination, talking about a silent movie, etc.)

In short, it seems that children normally like to engage in activities that are entertaining and pleasurable. The realization of this characteristic in children can lead to a somewhat different viewpoint to second language teaching for children in which teachers can feel free to change the class to a playground. In such an atmosphere, children's spontaneity, imagination, and playfulness can be controlled and manipulated at the service of language learning. Thus, teachers should employ a wide range of physical and linguistic games in which performing different tasks would provide children with opportunities to either learn new linguistic items or further establish what they already know.

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