Engaging Primary Learners Through Play

The importance of play

This is an excerpt from the new ETFO resource *Primarily Play: Engaging Primary learners through play.* Written by Dr. Janet Millar Grant, an executive staff officer in Professional Services at ETFO, and Susanne Eden, formerly an associate professor of education at York University, it is available from shopETFO; *shopetfo@etfo.org.*

To recognize the vital role of play in learning, teachers need to understand the connection between neuroscience and learning.

Neuroscience has tremendous potential for revolutionizing what goes on in schools. As Dr. Fraser Mustard, an eminent Canadian physician and advocate for play-based early learning, observes, "The merging of the neuroscience story with the developmental story has increased our understanding of how fundamental the first years of a child's life are in laying the base for the future. We are beginning to understand the linkage between the way the brain develops and the neurological and biological pathways that affect learning, behavior and health throughout life." Much has been discovered over the years about how the brain learns, and it is truly astonishing that educators, by and large, make so little use of this knowledge.

With knowledge of child development and neuroscience, educators are equipped to provide the very best learning opportunities for children. While teachers of young children have been most open to applying this knowledge, all educators need to put it into practice. At any age, learning is first and foremost the product of self-directed experience. As American psychologist and learning theorist Jerome Bruner once wrote, "We only truly know what we have discovered for ourselves."

Neuroscience helps us understand learning in the following ways.

- The brain is constantly changing. How the brain is shaped in the early years will have an effect on how well the brain functions in later life. It grows as a result of learning – one synapse at a time.
- Experiences change the shape of the brain. Nourishing our brains through many varied interactions with people and things in our environment builds the foundation for lifelong learning.
- Emotion has a profound effect on learning. When the learner feels safe, comfortable, and happy, learning occurs with ease. Tension, stress, and feelings of inadequacy inhibit learning.
- Motivation is the product of interest and engagement. Even those who have been labelled as having attention deficit disorder can concentrate for long periods of time when the activity is interesting and derived from personal needs.

Neuroscience supports a "constructivist" view of learning: that the learner constructs knowledge from experience, and assimilates new information into his or her existing cognitive map. In accommodating new information, new thoughts connect with existing frameworks to allow for more complex understanding.

Key points about learning and instruction

1. LEARNING IS SOCIAL

For centuries, we have assumed that learning in school must take place without social distractions. Isolating children by such practices as seating them in rows, giving them individual worksheets and assignments, and giving them warnings like "No talking" and "Do your own work" act against learning.

If does not matter whether the subject of the children's conversation is their classroom activity. The important thing is that the children are in contact with others. A silent classroom lacks something fundamental to learning, especially in the early years. Quiet times have a place, but the hum of creativity and friendship is a sign of a happy learning environment. Educators need to train their ear to the difference between the noise generated by creative play and the noise generated by chaos. Play has a happy, light-hearted tone while chaos is fractious and belligerent.

The social nature of learning means that communication is an essential element of play. Children learn by using language in the context of the situations that they have created. They use the semantics of language to create meaning and the structure of language to communicate their thoughts; they explore the pragmatic uses of language as they interact with others. Oral language is a key component of literacy and has strong links to reading and writing. As children communicate during play, they use the vocabulary associated with the context. Expanding vocabulary is important for understanding the meaning of texts that are read and is critical to communicating ideas in writing.

THINK ABOUT IT

What are the opportunities for children to talk and engage with others in the classroom? How are they using language? What is the focus of children's talk?

2. THE HUMAN BRAIN IS WIRED TO LEARN

All children are compelled from within to learn. They do not need a series of lessons or happy-face stickers to motivate them to learn how to walk and talk. This miracle of learning is witnessed by every parent, and by every educator, the world over. Yet we fail to understand the internal desire to learn in terms of learning in school. As with all significant learning through life, this urge to learn comes out of a profound need to connect with the social and physical environment in which we find ourselves. In schools, educators too often resort to external rewards and punishments which, over the long-term, erode the power of the intrinsic, self-directed motivation to learn. Is it any wonder that by the time children are in high school, learning has become a matter of "memorizing stuff," and feeding back to teachers what students think they want to hear? Learning becomes little more than trying to "guess what's in the teacher's mind."

When children are engaged in play, they make decisions, take control, and seek solutions. Given the opportunity to make choices and decisions, children are empowered as learners and develop confidence in their abilities.

THINK ABOUT IT

If children are wired to learn, what are they interested in learning about? What intrigues them? What motivates them?

3. LEARNING IS A HOLISTIC PROCESS

The most beneficial condition for learning occurs when all areas of development – physical, emotional, cognitive, and social – are proceeding as they should.

We are keenly aware of the impact of stress upon our own productivity as adults. We despair of solving a logic puzzle or a computer glitch when we are worried, tense, or exhausted. It is only when we leave a problem until the next day that we find the solution has been staring us in the face all along.

But we totally ignore this understanding in many school situations. How different the scores on a test might be if we recognized that a child has had no food; has been cowering under the bed all night, frightened by verbal or physical violence in the home; or simply does not perform well under pressure. We continue to value a quiet, tidy classroom – but learning is often anything but quiet and tidy.

For children, play is their way of growing: physically, emotionally, socially and cognitively.

Consider the learning that occurs as children build collaboratively with hardwood blocks of different shapes and sizes.

- **Cognitively,** children learn about structures and balance as they create a building, about symmetry as they create a balanced look, about position as they view the structure from various angles. They develop and use social skills as they plan what to do, listen to each other's ideas, negotiate roles, and share materials.
- **Language develops** through social use with others. As they engage with others, or with an adult, children use language to describe what they have done, to explain how it works, to reflect on problems and solutions.
- **Problem-solving** occurs when children try to find the block that will fit the space, when they have to change plans if the building isn't strong enough and collapses.
- **Emotionally,** children develop patience and persistence as they try over and over again to place the last block on the top without having the building topple over. They develop confidence as they gain control over the materials and experience success.
- **Physically,** fine-motor skills continue to develop as children hold objects and insert them into place and try to balance and position blocks.

Think about it

How do the materials and activities support children's development in all areas?

4. LEARNING IS NEITHER AN EFFICIENT PROCESS NOR BEST GENERATED THROUGH INSTRUCTION

The trouble with the natural process of learning is that, although predictable, it is not a tidy, systematic endeavour. There is a good deal of redundancy as a learner repeats an activity or explores and idea over and over again before it becomes permanently established. Centuries ago, educators found that rote learning was more efficient. If the learner would simply memorize what the teacher presented, things would progress much faster. A test could be given, and mastery assessed. This sounds compelling but it is not learning. Instead, it is what Russian developmental psychologist Lev Vygotsky calls "parrot-like learning that masks a vacuum." The knowledge and/or skill has not been internalized.

Think about it

What is valued about learning in the classroom? How are children's needs, interests, and background accounted for in instruction?

Instruction that relies on a passive, uninvolved learner leads to the pervasive boredom that strikes so many students as they progress into high school. In *Weapons of Mass Instruction*, John Taylor Gatto observes that not only are the kids bored, but the teachers are as well. The idealism and energy that propelled them into a career in education have long since evaporated in the tedium of mandatory curriculum that excites neither teacher nor student.

Think about it

How do children have a voice in the classroom? What are the opportunities for making choices and decisions?

Development of play across the Primary division

Type of Play	Ages 4-6	Ages 5-7	Ages 7-9
Exploration	*What is it?* Properties and characteristics: conservation of matter, spatial relations, etc. Mainly personal pursuit, interest.	*What can it do?* Investigation of concrete objects, as well as situations and events	*What can I do with it?* Collaborative discoveries. Sharing ideas
Pretend play	Symbolic representation of one object for another. May co-operate, share space, toys, and theme but all participants may play the same role or do the same action. Rely on personal experience as source for pretending.	Socio-dramatic play soars. Themes include community such as riding a bus, restaurant, etc. The putting on of the play may take over from the actual play itself. Begin to differentiate complementary roles.	Continue to rely on personal experience but beginning to use fantasy and make-believe. Roles work together to tell a story.
Games with rules	Generally, play along side one another without much interest in how others are doing. Tend to make up rules as they go along.	Begin to attend to rules and turn taking.	Competition prevails with stringent attention to rules. Being on the team becomes increasingly more critical.