

# HOW PLAY SHAPES THE BRAIN

Recent research has proven that play is crucial to cognitive and social development

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## 1 COOPERATIVE ABILITIES

Play stimulates collaboration. Children who lack opportunities for play are noted to be more solitary and marginal once adult.

## 2 LANGUAGE

Playing with blocks heightens the acquisition of language

## 3 PROBLEM SOLVING

Children who play more often develop creative thinking. Creative activities such as building or lego construction are effective methods to develop problem solving skills

## 4 HYPOTHETICAL THINKING

Role playing helps children create hypothesis regarding potential outcomes

## 5 SELF CONTROL

Through duelling activities, children become aware of their impulses and emotions and learn how to better manage them.

## 6 NEUROGENESIS

Play creates new cell regeneration, as seen with laboratory rats. This phenomena is observed in certain areas of the brain responsible for emotional control and social skills learning. The cerebral cortex, hippocampus and amygdalate produce proteins that simulate neuron growth.

## 7 SOCIAL ABILITIES

In role playing, children learn to manage conflict. This ability becomes essential in later years, to help solve problems.

## 8 GAMET OF EXPRESSIONS

When children play together they use language in a different fashion than when they are interacting with adults.

## 9 ANXIETY MANAGEMENT

Risky play helps children to overcome their anxiety and gage their sensory output through awareness of their body

## 10 CONFLICT RESOLUTION

The more children argue when they are young, (within reason), the better they are at resolving adult human conflict without resorting to violence

## 11 MATHEMATICAL THINKING

Four year olds that manage to build complex constructions, develop not only their language skills, but tend to have better grades in math regardless of IQ

## 12 ATTENTION

Students are more attentive in class if they are given the opportunity to play without instructions from an adult . A 10 to 20 minute break can suffice. Physical education classes cannot and should not replace these needed breaks.

## 13 CALMING

According to studies on animals, learning to play quietly as a child predisposes the adult to acquire a more stable overall humor .

