

COGNITIVE PROCESSES AND THEIR INFLUENCE ON ATTENTION, BEHAVIOUR AND LEARNING IN GENERAL

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Abstract: Abstraction is a fundamental cognitive process, involved in every kind of learning. The word abstraction has a number of meanings; here it labels the process of dividing a whole into its parts, also in respect of directing attention to one aspect with, or one property of the whole, disregarding for the moment the other.

In different cases, where barriers for learning caused problems for children, I have seen a distinct correlation between a facilitated abstraction process and successful learning.

A number of researchers have worked within this field. Magne Nyborg, in his theoretical works, has given a more comprehensive approach, not only exploring this as a theory, but also with applications for teaching and learning.

This article illustrates Nyborg's theory with the case of a ten year-old boy with serious behavioural problems. Facilitating multiple abstraction processes caused a positive change in learning and behaviour.

An issue in Nyborg's thinking is the primordial role of sense experience. The world around us is our source for perceiving, for experience, for learning. A number of sensations activate our previous knowledge, and by a process of mediation, it contributes in coding, the secondary process of experience. By means of this coding process, we are able to classify, to know what it is, that we perceive, and to label it by linguistic utterances of different kinds.

This paper wants to focus on some important cognitive processes and to consider their connection with the learning story of a boy with behavioural and attention problems.