## **Connectivism Criticism**

The existence of mankind and the prosperity achieved are accompanied by an increased gain in knowledge through the learning of individuals or groups. We all learn differently, however, and on the basis of this observation three essential learning theories have been developed that are still valid today: behaviorism, cognitivism and constructivism. Since technology has emerged in our daily life the question arises if humanity is in need of a new learning strategy.

Siemens, the inventor of connectivism, defines learning as a process which is not entirely under the control of the individual. Learning can also happen outside of ourselves for example in an organisation or database. His theory is based on connections, which enable us to learn more than we could without. His motivation for this new theory is the rapidly altering foundations. New information is continually generated and the ability to access the current state of information is more important than the knowledge of an individual.

In the following document we will introduce connectivism, provide arguments against it and why it covers only a small aspect of learning.

The first disadvantage of pure connectivism that we would like to highlight is the lower efficiency in the learning process. While the use of the Internet as a knowledge network may be inexhaustible, it does not cover important concepts such as reflection, learning from mistakes, error detection and correction. These are very important for the best learning outcome and can be hard to come by from videos, forums or blog posts. Students are more exposed to a more appropriate learning environment in traditional learning theories. It can even happen that a student works with low quality resources without proper feedback and learns wrong concepts, whereas constant feedback and error corrections belong in the classroom as long as we can remember.

Plon Verhagen (2), professor for educational design, states in his criticism of connectivism that it is not a learning theory but a pedagogical view. He states that a theory must be verifiable, but the information given by Siemens is not specific enough to develop an idea of how the theory could function in practice. Professor Bill Kerr (1) is of the same opinion, because he writes that the language and slogans used by Siemens are somewhat correct, but are to generalized to provide insights on how learning actually happens.

Another important point is the source of the knowledge. The networks need members which are already experts in a specific domain. But if everybody learns new stuff by practicing connectivism, nobody will expand their own knowledge base to an expert level. If nobody has

the knowledge level of an expert, nobody can provide this requested knowledge to the networks.

As a consequence, we need the three "base" theories: behaviorism, cognitivism and constructivism to gain deeper knowledge of specific domains.

**1 Bill Kerr**; 2006; a challenge to connectivism; http://billkerr2.blogspot.com/2006/12/challenge-to-connectivism.html

2 Plon Verhagen; 2006; Connectivism, A New Learning Theory?