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## **Connectivism – A Critical Look**

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### **Abstract**

The article comprises a critical assessment of the idea of connectivism. It shows the incorrectness of the assumption of knowledge existing in the Internet and consequences that such assumption arises, among others, entrusting the machine with some brain functions. The constructivist approach is presented, in the sense of featuring knowledge as an individual model of a part of reality – built by the learner.

### **Keywords**

connectivism, knowledge, processing of information, hypertext brains, digital dementia

### **INTRODUCTION**

Connectivism is not a learning theory but it is a concept that describes how to use the Internet in education, or even it can just be a name of the already existing way of using it. It appeared at the moment when two conditions were fulfilled: there existed the information overload and there were advanced tools used for searching for information (including Google). In addition, by the year 2008 the negative consequences of the influence of the Internet on human brain, such as shaping of the so called hypertext brains and making shallow of thinking, had not been known.

### **DISCUSSION**

The misconception and threat is an assumption that knowledge may exist out of the human – in the resources of the Internet. This misconception is to regard knowledge as a technological category, whereas it is a purely intellectual phenomenon with a spiritual aspect. One of the threats is the dependence of a human on the outer source of information and on the outer memory, with simultaneous negligence of own memory, especially the associative one. Peter F. Drucker, a worldwide known authority in the field of management clearly states that *wisdom and knowledge do not reside in books, computer programs and the Internet. There is only information there. Wisdom and knowledge are always embodied in a person, they are acquired and used by the learner.* The negation of the existing and well established views is unjustified.

### **Brain – between the human and the Internet**

The human brain performs two main functions: remembering and processing of information. Connectivism situates the former in the Internet and the latter in the human. It leads to a new learner model – “with a tagged on brain”. Leading the process of remembering – *de facto* the part of the brain’s function – out of human, has deep educational and cultural consequences. As N. Carr states *if we take memory out of inside of us and we pass it outside, our culture will die.*

Theoretically our brain, freed from the necessity of remembering details, may allot this additional “production capacity” to information processing. Nevertheless the research of neurologists (mainly of Gary Small’s) reveals that persistent usage of the Internet decreases the ability of information processing, as well as of criticism and deeper reflection. Thus we deal with double intellectual crisis – we do not train the ability of information remembering (it is not worth it since we have the Internet) and we cope with weaker and weaker information processing (as it is impaired by the Internet). As a result both crystallized (involving remembering) and fluid (involving information processing) kinds of intelligence decrease. German psychiatrist and neuroscientist Manfred Spitzer talks stray out about digital dementia – a considerable decrease in mental abilities of the contemporary human.

### **Information is not knowledge**

I am of the opinion that there is only information in the Internet – tiny bricks, which in the course of the learner’s own cognitive activity build up the edifice of knowledge in the brain. Knowledge is an individual model that reflects a certain fragment of reality in the human brain.

The influence of information technology on intellectual functioning of the human mainly depends on rationality of tools usage. In this sense the Net reflects the so called St Matthew effect. Intellectually rich individuals are able to use the Internet resources for further intellectual development, and for those who are intellectually poor, the Net can easily become a tool of mental decline.

### **“Know-where” as meta-knowledge**

Focusing on the category “know-where” is a considerable impoverishing of cognitive processes. It is not a task of school to deliver information, but to prepare the learner to own building up of knowledge, and further – to educate towards wisdom. Let us observe that a child who is creative by nature and is curious of the world, with the aim of getting to know the world, mainly raises a question “why”, and not “where”.

“Know-where” is metaknowledge understood as knowledge about sources of information. This category – as opposed to actual (real) knowledge – is egalitarian (it can be equal for everyone, as it does not involve understanding of anything, thus it is not a subject of description by means of Gauss’ curve), transferable and shallow (it does not have to involve connections between various elements). In the contemporary world of information overload it is quite useful and appreciated, yet it should not be identified as knowledge. Knowledge is connections between neurons in the human brain, and it is not the Internet connections between nodes and hubs.

## **CONCLUSION**

Currently a very negative phenomenon of regarding information and knowledge as being identical can be observed. It is also present even in numerous concepts of the knowledge society. It is a manipulation leading to a mental decrease of a human being. It is worth referring to a quote of a Nobel Prize winner for Literature Thomas S. Elliot: *Where is the Wisdom we have lost in knowledge? Where is the Knowledge we have lost in information?* The main misconception of the authors of connectivism is to show that information and knowledge are equivalent and to disregard its spiritual dimension. Knowledge is not only what we “know”, it is also what we feel and experience. As an intellectual (spiritual) category it is also the awareness of having knowledge as well as the awareness of own ignorance, putting questions and defining problems, doubting and discerning uncertainty. These categories are unique for a human only, they are utterly not technological. However, the connectivists maintain the technocratic or even technopoly-like attitude.

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## Biography



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