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### TEACHING/LEARNING THEORIES – HOW THEY ARE PERCEIVED IN CONTEMPORARY EDUCATIONAL LANDSCAPE

#### Abstract

This paper is about teaching and learning theories; their backgrounds and contemporary understandings expressed by different experts from various countries. It also gives insight into the results of a pilot research of Latvian teachers practitioners about their perceptions, thoughts and ideas about teaching/learning.

#### Introduction

In our modern, high technology society, everything moves at a fast pace, so it is necessary for education to make changes to provide more useful members of society. The teacher's responsibility does not focus on the content they teach, but on directing students to develop these lifelong learning skills. It is important to let students know that the responsibility for learning is with the learners themselves. Unfortunately, very often teachers concentrate more on how they teach and less on how students learn. Instead of thinking that a teacher is the only knowledge-giver who stands up front in the class, the 21<sup>st</sup> century needs such a teaching/learning process, where there is less teachers' talk and more students' talk; more consideration on how teachers can enable their students for independent learning.

#### Background

Claxton (1984) says that every psychology has a philosophy behind it. Psychology of learning creates theories about how people's theories change and develop. So people have been trying to understand learning for centuries. The debates that have occurred through the ages reoccur today in a variety of viewpoints about teaching and learning and the teachers' role in this process. As Wenger (2009) states that learning has traditionally been the province of psychological theories.

Skinner (1974), who is considered to be the father of modern *behaviorism* considered learning to be the production of desired behaviors. He denied any influence of mental processes. The pedagogical focus of behaviorism is on control and adaptive response and it they completely ignores issues of meaning.

Wilson and Peterson (2006) stress that behavioral theorists made the way for the '*cognitive* revolution' which involved putting the mind back into the learning equation. Learners make sense of the world, actively creating meaning, for example, while reading texts, interacting with environment or communicating with other people. As Branford, Brown and Cocking (2000) wrote:

*"It is now known that very young children are competent, active agents of their own conceptual development."* (p. 79).

Its pedagogical focus is on the processing and transmission of information through communication, explanation, recombination, contrast, inference, and problem solving.

This cognitive turn in psychology is often referred to as a **constructivist** approach to learning. Piaget (1929) was the first to state that students create knowledge rather than receive knowledge from the teacher. He recognized that students construct knowledge based on their experiences. If the experience is a repeat one, it fits easily to the child's cognitive structure (it is *assimilated* into the existing cognitive structure). If the experience is different or new, the child alters his/her cognitive structure to *accommodate* the new conditions. Their pedagogical focus is task-orientated.

**Social learning** theories take social interactions into account placing the emphasis on interpersonal relations involving imitation and modelling, and thus focus on the study of cognitive processes by which observation can become a source of learning (Bandura, 1986, 2006).

### Contemporary understandings of learning

Today teachers use different classroom practices that are based on all of the above mentioned ideas about learning. Illeris (2009, p. 1) says:

*"Learning is a very complex matter, and there is no generally accepted definition of the concept. On the contrary, a great number of more-or-less special or overlapping theories of learning are constantly being developed, some of them referring back to more traditional understandings, others trying to explore new possibilities and ways of thinking."*

Illeris (2009) has elaborated the concept of learning originally developed by Piaget (e.g. Piaget, 1952; Flavell, 1963). His concept of learning is basically constructive in nature as it is assumed that a learner actively builds up or constructs learning as mental structures. It is possible to distinguish between four types of learning:

1. Cumulative or mechanical learning (isolated information, something new that is not a part of anything else).
2. Assimilative or learning by addition (the new element is linked as an addition to a scheme or pattern that is already established).
3. Accommodative or transcendent learning (it implies that one breaks down (parts of) an existing scheme and transforms it so that the new situation can be linked).
4. Significant (Rogers, 1951, 1969), expansive (Engestrom, 1987), transitional (Alheit, 1994) or transformative (Mezirow, 1991) learning (it implies what could be termed personality changes, or changes in the organisation of the self).

Kegan (2009) speaks about informational learning and transformational learning. He considers that learning aimed at increasing our fund of knowledge, at increasing our repertoire of skills, at extending already established cognitive structures all deepen the resources available to an existing frame of reference.

*"Such learning is literally in-form-ative because it seeks to bring valuable new contents into the existing form of our way of knowing."* (p. 42).

Trans-form-ative learning puts the form itself at risk of change (and not just change but increased capacity). If one is bound by concrete thinking in the study of,

say, history, then further learning of the informative sort might involve the mastery of more historical facts, events, characters, and outcomes. But further learning of a transformative sort might also involve

*“the development of a capacity for abstract thinking so that one can ask more general, thematic questions about the facts, or consider the perspectives and biases of those who wrote the historical account creating the facts”* (p. 42).

So in other words informative learning is about changes in *what* people know, but transformative learning is about changes in *how* people know.

The factors that promote student learning are very various. A lot of these will be the role of the teacher, who can make a huge difference. Wilson and Peterson (2006) advise teachers to focus on *learning as a process of active engagement; learning as individual and social; and learner differences as resources to be used, not obstacles to be confronted.*

Bluma (2004) emphasizes that in various sources learning is described rather differently, but she considers the development of learning skills to be very important which demands new innovative curricula, as well as upgrading of teachers' competences with a particular focus on management skills associated with the learning process, understanding how to work with various groups of learners, and creating a suitable learning environment. Accordingly, it is necessary to develop an awareness of the nature of students' learning, the relevance of a teacher's own competences and abilities, and methods for managing the learning process in order to create opportunities for student learning. Learning is about students' performance with a certain outcome - student learning outcomes are the accumulated knowledge, skills, and attitudes that students develop during their studies.

### **Contemporary understandings of teaching**

Teaching as well as learning by various authors is described differently and there is no one unique definition. In the majority of literature both processes are treated separately. But teaching and learning in the classroom is a simultaneous process, it is a whole, i.e. the teachers' actions create situations for student learning.

James (1994) at the Annual Conference of the British Educational Research Association in Oxford outlines five conceptions of teaching:

1. Teaching as supporting student learning.
2. Teaching as an activity aimed at changing students' conceptions or understanding of the world.
3. Teaching as facilitating understanding.
4. Teaching as transmission of knowledge and attitudes to knowledge within the framework of an academic discipline.
5. Teaching as imparting information.

Dessus, Mandin and Zampa (2008) consider that teaching is cognitive-based tutoring principles for the design of a learning environment. Experts of Eberly Center for Teaching Excellence of Carnegie Mellon University (USA) highlight that teaching is a complex, multifaceted activity, often requiring teachers to juggle multiple tasks and goals simultaneously and flexibly and to create the conditions that support student learning. Wilson and Peterson (2006) specify the following implications for teaching:

1. Teaching as intellectual work.
2. Teaching as variety work.
3. Teaching as shared work.
4. Teaching challenging content.
5. Teaching as inquiry.

Thus, it can be concluded that in the contemporary education both actors, i.e. teachers and students in the teaching/learning process are active but each in a different direction – the teacher is active in thinking and projecting activities for the students' active learning and students become agents of their own learning activities and processes.

### **The case study**

The case study was carried out in two schools in Latvia. The teachers were asked to give their opinions about the terms 'teaching' and 'learning' in order to find out what understandings the teachers with different practical experiences have. Both were secondary schools – one school is situated in a town which is located very close to Riga, the capital of Latvia and in a way can be called as the suburb school, but another one is a rural school. There are 370 students and 45 teachers in the suburb school and 333 students and 40 teachers in the rural school. Totally 16 teachers were involved in this case study – correspondingly 10 from one school and 6 from another. All of the teachers were women with different work experience – from 1 up to 20+ years and the age from 30-59.

Part of the teachers held the point of view that teaching is:

- giving or transferring knowledge/skills to students,
- a passive process if a teacher is the key person,
- giving theoretical and practical knowledge using different methods,
- a targeted process implemented by a competent person with the aim to give knowledge.

The pedagogical focus is on the processing and transmission of information and it is more cognitive approach with the teacher who gives, transfers, helps to understand.

Some teachers believed that teaching is a process in which they should:

- enable students to learn independently,
- help students to develop critical thinking,
- help students to use various ways for understanding new material,
- do a lot of independent work.

The pedagogical focus of this approach is task-orientated which is held by constructivists.

Learning by the teachers is explained as follows:

- a process students are responsible for,
- development of new skills and knowledge which are based on previous knowledge,
- students' involvement in teaching/learning process for developing skills and knowledge working independently,
- process of inquiry where students look for theoretical and practical answers,
- students' skills to find, use, analyse, evaluate, make conclusions and build up new knowledge and skills,

- a process which continues a whole life.

There are traits of both the cognitivist and the constructivist approaches in the above mentioned teachers' responses. A teacher has a role of adviser, assistant, consultant but not as lecturer or instructor. Motivation is mentioned as a very important issue because the teachers consider if students are motivated to learn, then learning is not embarrassing. The teachers' opinions about the ratio of *teaching: learning* during lessons also differ:

- 3 teachers consider it should be 50:50,
- 2 teachers – 40:60,
- 5 teachers – 30:70,
- 1 teacher – 20:80,
- 1 teacher – 15:85,
- 1 teacher – 70:30,
- 3 teachers did not answer.

## Conclusion

1. *"Learning is about changing the way in which learners understand, experience or conceptualise the world around them"* (Bluma, 2004, p. 48).
2. The aim of teaching is to make student learning possible. The management of learning depend on the teacher's skills in creating learning experiences and his/her repertoire of teaching/learning methods.
3. In the contemporary education both teachers and students in the teaching/learning process in the classroom are active participants.
4. Although it is claimed that teachers are born, not made, the argument of this article is that good teaching requires teachers to create and use, expand and reject, construct and reconstruct theories of teaching and learning.
5. The case study showed that:
  - different teaching/learning approaches are used by the teachers,
  - not all teachers link teaching and learning and see both as a whole process - teaching/learning,
  - a teacher's role is treated both as a lecturer transferring knowledge to students and as a consultant, adviser, assistant who gives the right directions and manages the teaching/learning process.

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