EXPERIENTIAL LEARNING AND DIGITAL LEARNING - CONTRADICTORY OR COMPLEMENTARY? THE IDEA OF "LEARNING BY DOING" AND ITS RELEVANCE FOR TODAY'S TEACHING AND LEARNING.

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In the beginning of the 20th century, 'learning by doing' and 'experiential learning' were new progressive ideas in education. They are not only still actual, but also booming since the end of the last century. Nowadays, however, since the beginning of the 21th century digital or e-learning seems to be a new magic word in education. Is it a beginning of a new era, where new possibilities create new ideas, which replace the old ones or can both concepts enrich each other? In a brief presentation and discussion of experience based teaching and learning concepts, the author will reflect on the possibilities of 'experiential learning' in the 'digital age'.
Key words: *experience, reflection, learning by doing, experiential learning, digital learning*

Deutsches abstract:
Zu Beginn des 20. Jahrhunderts waren ‚Learning by Doing' und ‚Erlebnisorientiertes Lernen' neue fortschrittliche Ideen in der Pädagogik. Diese sind nach wie vor aktuell und erleben seit Ende des letzten Jahrhunderts eine gewisse Renaissance. Heutzutage, zu Beginn des 21. Jahrhunderts, erscheint allerdings ‚digitales Lernen' oder ‚E-Learning' als ein neues Schlagwort. Ist dies der Beginn einer neuen Ära, in der neue Möglichkeiten neue Ideen hervorbringen, die die

alten ersetzen oder können sie sich gegenseitig bereichern? Erlebnisbasierte Lehr- und Lernkonzepte werden kurz dargestellt und diskutiert, um so über die Möglichkeiten des ‚erlebnisorientierten Lernens' im ‚digitalen Zeitalter"' zu reflektieren.
Schlüsselwörter: *Erfahrung, Reflexion, Learning by Doing, Erfahrungslernen, digitales Lernen*

1 Introduction

Over two decades ago Kurt Weis, a German sociologist and an early critical observer of the "age of information technology" (1994), asked the question: "will we experience more or less in the future?" (Weis 1995, 327), in order to connect it with considerations on disturbances in experiential learning. The wave of the IT revolution, predicted by Weis and others (e.g. Toffler 1980), will change our world and our life decisively. In this context, it seems that at least two aspects are of crucial importance for human learning and development: The regression of body use and body experience and the increasing interconnection of humans with technology (Weis 1995). The increasingly evolving forms of digital learning or e-learning seem to present a significant challenge particularly to the concept of experiential learning, which focuses on real first hand experiences, on activity, and on learning using all senses. Nevertheless, can we still state that "experiential learning is the future of learning" (Jayaraman 2014)?

The article discusses the uniqueness of the experiential approach, based on Dewey's (1938) and Kolb's (1984) understanding of learning, and touches upon the German variant in the progressive education era (Erlebnispädagogik), and then confronts them with the challenges of digital learning.

2 Experience as a path to knowledge of the world

Experience is a commonplace everyday term, which is used today in various contexts. Hence, its meaning is diverse. In education the meaning covers a spectrum from perception to theoretical conception, from one unique experience to knowledge.

Experience as understood in the German experiential education (Erlebnispädagogik) can be largely attributed to the representation and elaboration of the term by the German philosopher and educationalist Wilhelm Dilthey (1957; 1958). In his 'life philosophy', he describes the three-step 'experience – expression – understanding' as the anthropological approach of the subjective self-appropriation of the world. Experience is the precondition for all understanding (Dilthey 1958, 225). The learning process goes from subjective experiencing to communicating the experience, i.e. to express and to explain it to others, in order to show that you have understood the experience and that you can interpret it. According to Waltraud Neubert (1932), who made the first concrete implementations of the life-philosophical demands on education and teaching, experience is to be understood as a teaching-theoretical process of knowing. Later, these thoughts were also reflected in other educational theories and concepts, especially in the constructivist-oriented learning theories (e.g. Vygotsky 1934; Dewey 1938; Piaget 1970; Bruner 1981).

2.1 Learning by doing – an action theory approach

On all levels, from kindergarten to academic education, action theory approaches in education have been booming at least since the 1990s. This was a consequence of social movements and (social) political reform in the two preceding decades. The origin of the educational program, however, is much older. It can be connected with key words such as "carpe diem (seize the day)", "the way is the goal" or "learning by doing". Action orientated approaches usually take the

lifeworld of children as the starting point for their (learning) activities. Experiential learning begins with action and in this way tries to create the connection between inner and outer experience, between the inner world and the outer world. Manageability, immediacy and inevitability are the modern key terms for experiential learning. John Dewey is regarded as a mentor of American 'progressive education' and as one of the originators of action-oriented and experiential learning. The quote 'learning by doing', however, which is often attributed to Dewey, has not been used by him for the first time. According to Knoll (2011; 2017), the maxim comes from the English translation of 'the Nicomachean Ethics' of Aristotle: "For the things we have to learn before we can do them, we learn by doing them". However, it is true that Dewey used this slogan to put physical activity beyond memorizing in educational theory and school practice.

2.2 Experiential Learning

Experiential learning and experiential education are popular buzz words, which are used often and interchangeably in many educational circles and concepts. Experiential education is to be understood as an educational philosophy, which implies that there is an intended aim toward which the experiential learning process is directed, an intentional, purposeful approach to teaching and learning. Whereas experiential learning can be seen as a method with leads the learners by means of direct experience and focused reflection to increase knowledge, develop skills, and clarify values.

David Kolb's publication *Experiential Learning – experiences as the source of learning and development* (1984) is probably the most elaborate work about experiential learning. He based his approach on the basic ideas of John Dewey (1938), Kurt Lewin (1951) and Jean Piaget (1970). By reflecting on and dealing with different approaches, he refers to Dewey's concepts of reflective thought and action, to the

Lewinian tradition of action research and to the Piagetian four step model of cognitive development. Finally, he provides a useful model to illustrate the cycle process of experiential learning (Kolb 1984). In the last thirty years his work has met with various criticism (see e.g. Miettinen, 2000; Webb, 2003), but also with numerous improvements and applications, as well as advancements in different educational perspectives. Therefore, it is correct to say that Kolb's publication is the most fundamental for experiential learning.

Of the main characteristics of experiential learning proposed by Kolb (1984, 25ff) the following best emphasize the intention of this approach:

- learning is best conceived as a process, not in terms of outcomes
- learning is a continuous process grounded in experience
- learning is a holistic process of adaption to the world
- learning is a process of creating knowledge.

Consequently Kolb defines his understanding of learning as "the process whereby knowledge is created through the transformation of experience" (Kolb 1984, 38).

3 Digital Learning

Even if the term 'digital learning' has become very common and familiar, there is no clear explanation of its meaning. In a broad understanding, it can be said that digital learning is a method that integrates technology with the process of learning. This can encompass a wide spectrum of teaching and learning practice, or in other words, digital learning can be implemented across any areas of learning. E-learning, virtual learning, internet sites containing educational resources, as well as educational gamification and the like contribute to the development of digital learning.

In connection to the teaching-learning processes in school, we can formulate two general goals for digital learning: 1) how digital

technology can best support the developing of digital skills needed to attain maximum benefit from the use of technology throughout life; 2) how to create and to behave in accordance with societal norms when using digital technology. The concrete skills, which are needed to develop, can be differentiated into two types: digital skills and digital navigation skills. The first are pure technical skills required to use digital technologies, whereas the second is more about the abilities to succeed in the digital world. These include e.g. finding and prioritising information as well as assessing the quality and reliability of information, also called 'digital literacy' (see also Zoglowek 2018). Even if the use and effect of digital technologies is discussed in ambivalent terms (see e.g. Iqbal & Horvitz 2007; Kay & Lauricella 2011; Müller & Oppenheimer 2014; Herzig 2014; Schaumburg 2015; Jacob 2016), the digitization of teaching and learning is unstoppable. There is an ongoing discussion on blogs and in articles on the internet about the opportunities and challenges of digital learning. The number of benefits of digital learning varies and the number of recommendations the teacher has to deal with in digital teaching is almost unlimited. Those most frequently named and probably the most important are personalized learning, expanded learning opportunities, competency-based learning, collaborative learning and cultural relevance.

4 The constructivist learning theory – action and reflection

The brief characterisation of the two approaches has probably shown more shared characteristics than differences. Schools are places of learning and preparing for future life. This is a difficult task, because of the variety of learners, individual learning styles and strategies, and varied individual learning goals. Educational models, concepts and individual measures try to take these into account and to respond to them – experiential learning mainly through the holistic approach,

with head, heart and body; digital learning mainly through the personalized approach, which can take into account the individual starting position and the individual learning modus. Both approaches seem to be good initiations of learning processes. However, it is just a start, and it is ultimately not enough for a successful learning process. In order to gain knowledge, experiences require reflective processing, as do digital materials. With this progression, both approaches follow the constructivist learning model, which is, according to Fox (2004), based on the following basic assumptions: 1) Learning is an active process, 2) knowledge is constructed, 3) knowledge is invented and not discovered, 4) knowledge is either something completely personal or something totally social, 5) learning is a process, where the goal is to understand the meaning or the relevance of the world, 6) effective learning requires meaningful, open and challenging problems that the learner should solve (see also Wohlgemuth 2009).

Again, only reflective progression leads to knowledge. In the experiential learning approach, the sensory and holistic experiences have to be articulated, described and reflected. Frequently based on Kolb's model of the Learning Circle (Kolb 1984), there are a lot of examples of how this verbal or other reflective progression can be achieved (see e.g. Zoglowek and Rolland 2009; Wohlgemuth 2009; Beard & Wilson 2013). Digital learning must have the same perspective: the pure use of digital media or the digital collection of information does not mean knowledge acquisition or knowledge enhancement. Only by a reflective use of it can one speak of learning. The research, which found that students benefit more from digital educational media when they work in groups, supports this statement, because common work with computer programs stimulates conversations between the students and that encourages learning (Hillmayr a.o. 2017).

The advantage of both, experiential learning and digital learning lies in the high motivational factor, which can lead to higher attention and further interest, and thus also to deeper understanding.

5 Conclusion

How to experience the life world? How to learn in, about and for the life world? It seems experiential learning and digital learning are two approaches, each with its own advantages, which are not contradictory. They can support each other, because in the digital world and with digital technology experiences can be gained, and on the other hand, digital techniques can give new possibilities for experiences. Experiences are needed to develop a mindset for a digital world as well as for the actual world itself. For the 'digital natives,' i.e. the young generation today, the real world is a digital world. The main task for the school is to prepare for students this world. One perspective for teaching and learning in the 21st century can therefore be summarised as follows: experiential learning also for digital knowledge, and digital learning also for more experiences. However, the most important task, from a pedagogical standpoint, is to find and communicate a balance. The development of our civilization requires the body less and less, but every single person needs it. Therefore, it is important to pay attention to experience on different levels, in different areas and with different senses, and also to consciously go from one world to the other.

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