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ACTIVITY, ACTIVE LEARNING AND THE ROLE OF EPISTEMOLOGY

Abstract: In this article, the current researchers deal with the issue of activities in the classroom through an analysis of the current didactic concept of active learning. The current researchers proceed on the assumption that the didactic principle of activity has been emphasized throughout the entire history of pedagogy, and comprehensions of the authors of the active learning concept on one hand and of the authors and the defenders respectively that are according to the first mentioned authors associated with the so-called traditional lesson on the other hand. As the current researchers show, they all advocate the activity in the classroom through different teaching methods and activities, consideration of students' interests and experiences, but they understand these issues differently. The analysis of the conceptions of the role of teaching methods, students' experiences and interests in order to achieve the activity in the classroom leads the current researchers to the conclusion that the difference between the authors is associated with the understanding of the goal and success of the lesson. According to the authors that are understood as traditional the difference is related to the correspondence of transferable knowledge in society and knowledge of students, while according to the authors of the concept of active learning, it is mostly related to the discussion between the teacher and the students about the tasks of the lesson, seeking goal of the lesson, and to the experience associated with it. Since the highlighted difference in its basic characteristics complies with our knowledge, the current researchers have found out that the difference between the authors' approach to activity and teaching is conditional upon epistemology.

Keywords: the concept of active learning; the understanding of the activity in the classroom according to authors that are associated with the traditional lesson by the proponents of contemporary didactic strategies, and the authors who advocate the concept of active learning as a contemporary didactic concept; epistemology; pedagogy; knowledge.

INTRODUCTION

The concept of *active learning*¹ (Handlungsorientierter Unterricht) is often used in didactics, especially recently. According to some authors (e.g. *Enzyklopädie Erziehungswissenschaft*, 1986, cited in Gudjons, 1987, p. 8), it is the action-oriented lesson that begins with material activities, or to some others (e.g. Gudjons,

1 The term "active learning" is in Didactics about half a century old and is understood in the text as a specific concept, the so-called open lesson, which is a modern didactic concept and a wider term than the concept of the active learning.

1987, 1994; Jank & Meyer, 2006, pp. 230–244; Meyer, 2011a, pp. 214–215; Meyer, 2011b, pp. 157–158) it enables the development of different characteristics or abilities of students, such as: integrated and collaborative learning, expression of interests and experiences and negotiating with the teacher about the performance of lesson or teaching process, respectively². With regard to the present definition of the concept of active learning (Jank & Meyer, 2006, pp. 230–244; Meyer, 2011a, pp. 214–215; Meyer, 2011b, pp. 157–158; see also Glöckel, 2003, pp. 145–148; Gudjons, 1987, 1994; Terhart, 2005, pp. 165–171), the question arises whether the activity in the classroom was not advocated in the past, and what, if anything, is supposedly differently defined with this concept compared with the didactic principle of activity.³

In the current text the current researchers follow the idea that the tendency for activity in the classroom is present throughout the entire history of teaching, while the views on it or, more precisely, on the question of what it is and how to reach it are different. The current researchers will confront the views on the activity according to the group of authors of the concept of active learning, or defenders of the concept (e.g. Jank & Meyer, 2006; Meyer, 2011a, 2011b), and on the other hand, the authors (e.g. Herbart, 1874; Niemeyer, cited in *ibid.*), who do not belong to this group and their teaching concept, which the first group considers to be the so-called traditional teaching concept. For this purpose the current researchers will discuss teaching methods, especially classroom discussion and lecturing. The authors of the second group (e.g. Herbart, 1874; Niemeyer, cited in *ibid.*) believe that only these methods can promote activity during the lesson, whereas the authors of the first group (e.g. Gudjons, 1994; Meyer, 2011a, 2011b) argue the very opposite. Further, we will look at the role of experience and interest of students in the lesson, since the consideration of both factors will significantly contribute to the activity during the lesson. We will follow the thesis that all of the referenced authors emphasize the importance of active learning, but in the perception of this activity they differ according to the epistemological basis on which they define it.

Although the issue of active learning appears mainly in the context of discussions on primary education (e.g. Terhart, 2005, p. 171; see e.g. Jank & Meyer, 2006, pp. 230–244), it is also relevant in considering innovative methods and approaches to teaching as a prerequisite for quality, modern higher education. Following

2 In the definitions of the concept of active learning, it is written that students discuss with the teacher about the objectives and results or phases, respectively of the learning process, and the activities that would lead to the goal (e.g. Gudjons, 1987, p. 12; Jank & Meyer, 2006, p. 231).

3 According to Mi. and Ma. Cencič (2002), the modern teaching concepts, including active learning (but also for e.g. a problem-based learning, experiential learning, project-based learning, research-based learning), do not deny the validity of didactic principles of classical didactics (i.e. activities, problem teaching conception, or considering the experiences), “but, on the contrary, they rejustify them with their theoretical psychological requirements” (p. 17).

the Medveš (2015) it is not even productive to distinguish between the scientific discussion of primary active learning or teaching, respectively and higher active learning or teaching, respectively as the concept of teaching (p. 13). The problem of activity, as in the current researchers' context, is a general didactic problem, so it will understand it here as such.

In the first part of the article the current researchers will deal with the issue of activity through the treatment of teaching methods. The second part will consider the experiences and interests of students.

DIFFERENT TEACHING METHODS, THE IMPORTANCE OF LECTURING AND CONCEPTION OF SUCCESS IN TEACHING

Integrated activity of students and different teaching methods

According to proponents (Gudjons, 1987, 1994; Jank & Meyer, 2006, p. 231; Meyer, 2011a, p. 214; Meyer, 2011b, pp. 157–158), one of the basic characteristics of the concept of active learning is that it should enable students to engage in so-called integrated activity. In contrast to the traditional lesson, which particularly promotes voice and hearing activities such as lecturing and discussion, they should “be taught not only with the head, but also with the hands and feet, with the heart and with all the senses” (Meyer, 2011b, pp. 157–158). Therefore, as Gudjons (1994) states that active learning is not “a vocabulary and book school” as a traditional school, “but a school in which learning takes place through activities during lesson time” (p. 36)⁴ and where as many senses as possible, head, emotions, hands, feet, ears, eyes etc. are active” (Gudjons, 1987, p. 11).⁵

In this regard, the lesson should open up “to activities that are introduced in such a way that the students agree with the teacher on what tasks they will set out to do and what the end result of the learning phases will be” (Jank & Meyer, 2006, p. 231). Thus, active learning should also be promoted through joint activity between teachers and students, i.e. through joint activities, such as experimenting, modeling, acting and performing (Gudjons, 1987, p. 12; Jank & Meyer, 2006, p. 231; Meyer, 2011b, p. 157). This as well should be otherwise conceived from a traditional approach that should emphasize activities that are characterized by a teacher's direct teaching role (Meyer, 2011b, p. 157; see also Gudjons,

4 In this context, Gudjons (1994) states that the school in which active learning takes place is “not a vocabulary and book school, but a school in which learning takes place through activities during the lesson” (p. 36).

5 Jank and Meyer (2006), on the other hand, define “active” learning within the concept of active learning as “the lesson in which students can learn not only with their head, but also with their hands and feet, with their heart and with all their senses” (p. 231).

1987, p. 12). As Meyer (2011b) writes in the traditional lesson “students are more often involved in mental and orally presented activities than in sensually integral ones [...] they have to listen, read quietly or out loud, talk, discuss, write, count, wait for others, collect or distribute something [...]. It comes from the very structure [...] activity that they have an almost urgent tendency to greater dominance of the teacher” (p. 157).

In other words, the activities concerned relate to the question of teaching methods and forms of teaching, which roughly means the ways of teaching for learning and knowledge of students. As can be seen from the references, traditional teaching is characterized by activities based on listening and speaking skills, such as the lecture method and classroom discussion, and on the form of teaching that involves the whole class directly, as the teacher is supposed to play the dominant, direct teaching role. For active learning there are the teaching methods of experimenting, modeling, acting and performing, also including common activities that are characteristic of the indirect way of teaching that are emphasized (for more see e.g. Blažič, Ivanuš Grmek, Kramar & Strmčnik, 2003, pp. 379–392).

But different activities during a lesson in terms of the teaching methods have been highlighted by some of the authors of the past. Comenius (1927), for example, demanded that the students should activate as many senses as possible during the lesson and to be connected through “hearing with seeing, speaking with hands” (cited in Drews, 1967, p. 233); Diesterweg (1962) pointed out that teachers should ensure that students are active with “hands, speech and head” (cited in *ibid.*, p. 232). Pestalozzi (1890) is also known for his so called trio of heart, mind and body that should be considered in teaching. The emphasis on the diversity of class activities could be found also in certain works of 20th century authors (e.g. Strmčnik, 2001, pp. 312–319; Šilih, 1966). Šilih (1966), for example, stresses activity that “influences the whole student’s personality, his/her emotional sphere and his/her will, his/her motor process [...] and his sensual system that develops and progresses through the activity” (p. 30).

Therefore, the exposed authors supported the use of different teaching methods. However, there is a difference in how everyone understands the activities. The current researchers will therefore focus on activities based on listening and speaking skills, which are particularly exposed above.

LECTURING AND CLASSROOM DISCUSSION AND COMPREHENSION OF THE SUCCESS OF THE LESSON

Jank and Meyer (2011b, p. 157) and Gudjons (1994, p. 36), as the previous chapter shows, critically determine activities based on listening and speaking

activities, while Herbart (1874) and Niemeier (cited in *ibid.*) understand them differently. The current researchers have found an example of a record in which Herbart (1874) interprets Niemeier's (cited in *ibid.*) record of how teachers should teach a learning content through classroom discussion or conversation, respectively, that is:

“In conversation, we start from the objects that directly influence the children's senses, and we let the children show and name these objects. Then we move on to objects that are not present, but children have already seen or felt them, and at the same time we stimulate their imagination and language so that they list the objects they remember. The objects involved are: everything in the classroom, everything that is observed on the human body, everything that belongs to food, clothing, comfort, everything that belongs to the fields, gardens, farms, animals, plants, as far as they know them.” (Niemeier, cited in *ibid.*, p. 271)

As seen, by using the discussion as a teaching method the author (*ibid.*) assumes that the students already have the experience and they already understand it comprehensively or holistically, respectively; at the starting point they refer to the subjective world of students, to various indirect and direct objects, even to tastes and feelings. Discussion as a teaching method (or activity) is therefore not understood in the narrower sense, literally as activity based on listening and speaking skills (e.g. Gudjons, 1994, p. 36; Meyer, 2011b, p. 157). This is no different from the explanation Herbart (1874) gives, with a somewhat longer record of how to present the subject during the lesson or how it should be interpreted to the students, respectively:

“Delivering subject matter should work in such a way that the student has the impression that he can hear and see the topic described at that very moment. That's why he actually has to hear and see a lot; what points out that the experience circle, if too narrow, should be widened by leading the students and demonstrating the subject. [...] All items for illustration must be added to this. Whether this kind of lesson is also successful will be seen in the repetition when the students not only repeat the most important point, but first and foremost use the same expressions, as used by the teacher.” (Herbart, 1874, p. 268).

The lecture must therefore function for the students as the experience of hearing and seeing. If that is not enough, it is necessary to additionally “show” them and to “lead them around”, and use other teaching materials. So, the lecture

cannot be narrowly understood, literally as a vocal–hearing activity (e.g. Gudjons, 1994, p. 36; Meyer, 2011b, p. 157). Moreover, it seems that, according to Herbart (1874), the lesson is successful in that the students repeat the most important points after the teacher; in fact, the more they use the learned expressions, the more they remember, the more successful is the lesson. So, the success of the lesson depends in fact on the activity based on listening and speaking skills, and on the capability of the restatement of the subject matter by the student.

But the role of different activities for the success of the lesson and the definition of success in the concept of active learning are understood differently. The notion itself that the activities based on listening and speaking skills are inadequate, not integrated (e.g. Gudjons, 1994, p. 36; Meyer, 2011b, p. 157), and that the direct role of the teacher encouraging memorization is problematic (*ibid.*), indicates that Gudjons (1994, p. 36) and Meyer (2011b, p. 157) do not perceive the reproduction of the subject matter as a basic medium in achieving success in lesson. According to them, the condition for success lies in a common agreement between the teacher and the students on tasks and results regarding lesson and in finding goals for its performing. As for active learning Gudjons (1987) writes: “This educational concept gives a lot of space [...] first to co-organization and co-responsibility” of the students and it is “less about the operationalization of the learning objectives than it is about finding the action goals that should be achieved” (p. 12). It is in this context that the students should more develop their self-regulated learning and their own responsibility (*ibid.*). The highlighted emphasis can be referred to the Medveš’s (2003) record about the still current theoretical approach of self-regulative learning. According to the author (*ibid.*), the success of this pedagogic concept depends on “whether the student feels attracted to the topic, whether he is included in the situation, above all, whether he/she experiences the goal as realistically achievable” (*ibid.*, p. 27).

So if Herbart has conditioned the success of the lesson with the quantity and quality of repetition or transferable subject matter, then in the concept of active learning success lies in finding the action goals, the feeling of being included in the discussion, in the ability to agree on tasks and outcomes related to the implementation of the educational process and in experience referred to above, as achievable action goals. From the problem of the integrity of learning activities (as the problem of realization of different learning activities) the current researchers have therefore come to the conclusion that a different understanding of learning activities is associated with a different understanding of a successful lesson.

INTEREST AND EXPERIENCE

Conception of interest

Orientation to the interests of students is another feature of active learning according to advocates of active learning (Gudjons, 1994; Jank & Meyer, 2006). As described by Gudjons (1994), active learning “complies with the interests and experiences of students (and teachers as well) [...] promotes, supports and develops them or ensures that they arise at all” (p. 59). More radical are Jank and Meyer (2006, p. 231); according to them active learning “attempts to make the subjective interests of the students into the starting point of educational work. However, it does not stop only there, but also offers the students the opportunity to become aware of their interests while participating actively in new topics and problems, and to evaluate their interests critically and continue to develop them” (ibid.).

But it is recalled that some authors from the past have also highlighted the consideration of the interests of students. According to Herbart (1874), for example, in lesson one should develop the interests of the students to create a versatile personality (Javornik & Šebart, 1991). As the author (ibid.) writes:

“The interest is one’s own activity (Selbsttätigkeit). The student’s interest should be multilateral; therefore, we demand a versatile self-activity [in lesson]. However, it is not every self-activity that is desirable, but only the one that is right and properly oriented; otherwise lively children could simply be left alone; they would not need to be educated or led” (p. 241). Therefore the lesson should “direct the way of thinking and efforts of the students and guide them to the right way” (ibid.).

Thus, the interest is in the function of the activity, which develops into versatility, thinking and effort in the right direction of development. Similarly, Šilih (1966) stresses that conscious adoption of subject matter and cooperation are both essential in order to stimulate interests and abilities (p. 30). The consideration of the interests of the students in the lesson is nothing new that was introduced through the concept of active learning. But there is a difference between the referenced authors in how they perceive the interests.

According to Jank and Meyer (2006), one should therefore, among other things, rely on the subjective interests of students, which should be the basis for the learning process. Yet, according to Herbart (1874), interest is not a (primary) means of education, but it is its intention, the goal to which we first have to bring the students through guiding and teaching. Therefore, according to Herbart (ibid.) the lesson should promote and develop interest, which enables the

development of virtues (p. 236). Similarly, it can be established by Šilih (1966) that interest can therefore be stimulated, first through the acquisition of subject matter.

According to Herbart (1874) and Šilih (1966), forwarding the subject matter is the basic condition for forming interest and personality, while interest according to Jank and Meyer (2006) should be the precursor for developing the personality and forming the lesson or educational process, respectively.

Students' experiences and knowledge

Jank and Meyer (2006) understand interest also as a particular type of students' experience, while both interest and experience, according to Herbart (1874), each has its own meaning. Herbart (ibid.) clearly distinguishes between, on the one hand, the interest that still develops and fundamentally gains, and on the other hand experience that "only" helps to facilitate clarity (and it is essential for that). But experience cannot fully dictate the course of the lesson. As he (ibid.) says:

"Experience, as it is, is not such a teacher who would offer the right lesson. Experience does not follow the law by which one gradually proceeds from the elements to the compositions. Rather, experience talks about things and events at length, often leading to confusing concepts or misunderstanding (*verworrene Auffassung*), respectively. Because the connections have become individualistic, the lesson's task is to bring this reverse order back to the right one. Experience associates only what it offers itself. If we allow these existing associations to intervene into the very lesson (as it should happen) than that what we have experienced must be consistent with this what we have learned. Hence, in the supply (*Vorrath*) of experience, the lack of clarity and the corresponding meaning should be complemented by an explanation." (Ibid., pp. 268–269).

It can be seen that, according to Herbart (ibid.), there is a pre-defined set of subject matter that the student has to acquire through experience. Therefore it is in this context that the result of the lesson is "closed" in terms of learning objectives that the students aim to achieve and with this acquire the foreseen knowledge. But this is not the case according to Jank and Meyer (2006), where the supply of subject matter is relatively open, since the content of the lesson is inspired by the students' interest.

CONCLUSION

On the basis of the study of some characteristics of the concept of active learning (diversity of activities, interest and experience) having been outlined here, we found that in the matter of students' activity during the lesson all referenced authors have emphasized different activities or a variety of teaching methods, respectively. For this purpose they all argued for students' experiences and interests being included and the current researchers also found that they have understood the experience, interest and activities differently, as they have recognized the success of the lesson differently.

Regarding the established concepts of contemporary pedagogy faced with the concept of active as an open lesson, the challenge of redefining the teaching that derives from different perspectives on knowing arises. It concerns issues, like sources of knowledge, the possibilities of this, the objective values of knowledge and the very subject of it (see more Ule, 2004). These issues concern mainly the philosophy of knowledge, but the current researchers are also significantly associated with these issues in didactics and pedagogy, with the issue of how to define, in pedagogy and didactics, the knowledge and the cognitive path in relation to students is dealt with. The question is whether it is still reasonable or appropriate to teach and to give lectures according to a knowledge transfer model as we know it through history. Or is it time to think in the direction indicated by the authors of the concept of active as an open lesson, who believe that the lesson is a process where the students' ideas are considered as the development-orientation for teaching and learning the subject matter. What this means for the teacher or lecturer, for the act of teaching, lecturing and learning, remains an open question. Certainly, the effective tracking of this point shows an orientation toward a fundamental change of the established so-called "learning society", but the question is in which one and whether in a more humane one.

REFERENCES

- Blažič, M., Ivanuš Grmek, M., Kramar, M. & Strmčnik, F. (2003). *Didaktika*. Novo mesto: Visokošolsko središče, Inštitut za raziskovalno in razvojno delo.
- Cencič, Mi. & Cencič, Ma. (2002). *Priročnik za spoznavno usmerjen pouk*. Ljubljana: Mladinska knjiga.
- Drews, U. (1976). Unterrichtsprinzipien in der bürgerlichen Didaktik. In U. Drews (Ed.), *Didaktische Prinzipien. Standpunkte, Diskussionsprobleme, Lösungsvorschläge* (pp. 228–256). Berlin: Volk und Wissen Volkseigener Verlag.
- Glöckel (2003). *Vom Unterricht. Lehrbuch der Allgemeinen Didaktik*. Bad Heilbrunn: Klinkhardt.

- Gudjons, H. (1987). Handlungsorientierung als methodisches Prinzip im Unterricht. *Westermanns pädagogische Beiträge*, 39(5), 8–13.
- Gudjons, H. (1994). *Handlungsorientiert lehren und lernen. Schüleraktivierung – Selbsttätigkeit – Projektarbeit*. Bad Heilbrunn: Klinkhardt.
- Herbart, J. F. (1874). *Pädagogische Schriften. Johann Friedrich Herbart. Mit Herbarts Biographie. Von Friedrich Bartolomäi. Bd. 1*. Langensalza: Veher.
- Jank, W. & Meyer, H. (2006). *Didaktični modeli*. Ljubljana: Zavod Republike Slovenije za šolstvo.
- Javornik, M. & Šebart, M. (1991). Herbartov koncept vzgoje. *Sodobna pedagogika*, 42(3/4), 27–37.
- Medveš, Z. (2003). Šola zate in zame. *Sodobna pedagogika*, 54, posebna izdaja, 84–102.
- Medveš, Z. (2015). Spopadi paradigem v razvoju slovenske pedagogike. *Sodobna pedagogika*, 66(3), 10–35.
- Meyer, H. (2011a). *Unterrichtsmethoden. I: Theorieband*. Berlin: Cornelsen-Scriptor.
- Meyer, H. (2011b). *Unterrichtsmethoden. II: Praxisband*. Berlin: Cornelsen-Scriptor.
- Pestalozzi, J. H. (1890). *Wie Gertrud ihre Kinder lehrt. Ein Versuch, den Müttern Anleitung zu geben, ihre Kinder selbst zu unterrichten – in Briefen*. Leipzig: P. Reclam.
- Strmčnik, F. (2001). *Didaktika. Osrednje teoretične teme*. Ljubljana: Znanstveni inštitut Filozofske fakultete.
- Šilih, G. (1966). *Didaktika*. Ljubljana: Državna založba Slovenije.
- Terhart, E. (2005). *Lehr-Lern-Methoden. Eine Einführung in Probleme der methodischen Organisation von Lehren und Lernen*. Weinheim, München: Juventa Verlag.
- Ule, A. (2004). *Dosegljivost resnice*. Ljubljana: Znanstveni inštitut Filozofske fakultete.