PROBLEMS OF EDUCATION IN THE 21st CENTURY Vol. 79, No. 3, 2021

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SUBJECT DIDACTICS: RELEVANT ISSUES

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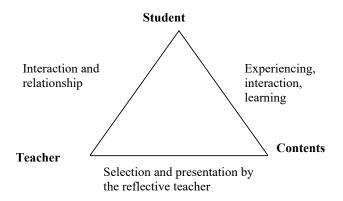
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I would like to thank the editor of the journal for the space to write some words about actual problems of subject didactic. I would like to ask all readers to remember, this is not a classic scientific text, it is only short reflection for the actual situation in subject didactic as it is perceived by the author of this text.

Current subject or disciplinary didactic is a dynamic discipline, which is still changing and is reporting to actual trends in the relative disciplines like pedagogy, psychology, sociology, philosophy, and others, and also the newest findings from the scientific disciplines, which are connected with subject didactic. The didactic is perceived in different ways by different countries. For example, in the Middle Europe and former post-communist countries it is possible to observe subject didactic, where every subject, has got its own didactic (e.g., didactic of biology, didactic of history, ...). For Anglo-Saxon countries it is typical disciplinary didactic (e.g., science didactic). It can cause a little bit problematic view, but the nature of concept is similar. In this text it is used the term "subject didactic".

Nowadays, many models of didactic exist in scientific world. It is one of the basic models, which is presented in every theoretical didactic publication. Central to didactics is the triangulation among the student, the teacher, and the content (Hillen & Landis, 2014). Hence, it is called the didactic triangle (Figure 1). This is a basic concept on which nature is building all didactic. However, many didacticians are working only in the boundaries of this model, where the visible terms are determining. It is a work with scientific content, which is through teacher transmitted to pupils/students. It can be realized through different methods, forms, and approaches. Some are working better; some are working worse.

Figure 1
Didactic Triangle



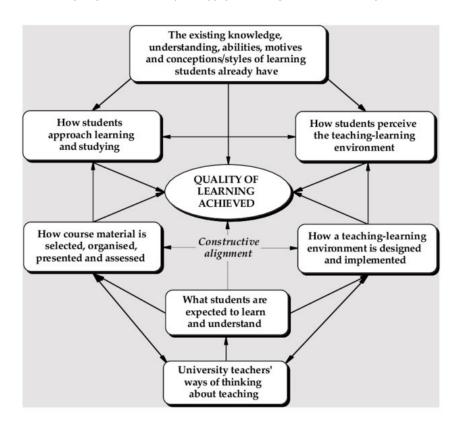
Above the mentioned model (didactic triangle) there is not only one. In the scientific world of didactic minimally 13 different models exist, which are divided into several models and concepts. Some of them are more theoretical, some more practical, and some more scientific. For the correct understanding of didactic as the scientific discipline, it is necessary to know

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every of them. Some models are appropriate for teachers, some for researchers in this field of study (Gascon & Nicolas, 2017; Londal & Greve, 2015; Perig, 2018). It is important to realize, that subject or disciplinary didactic is a scientific discipline, so academicians and researchers in this field of study should focus on every aspect of this scientific discipline, not to aim only on the presentation of new teaching and learning material, but also to focus on the research activity, where all parts of didactic will be respected. So, the better model for understanding of subject didactic in general is in figure 2 according Entwistle (2003).

Figure 2 *Model of Didactic (subject and disciplinary) (according Entwistle 2003)*



In the model (figure 2), all needed subdisciplines are taken into account, which created didactic as it is in core understanding (see above). It is needed to mention one thing regarding to subject didactic. The didactic is a discipline, which has got unclear goals, where to aim in research purposes, if basic or applied research. And it is possible to meet with opinions, that didactic (general or subject) is a theoretical discipline. As every discipline, also any subject didactic has got theoretical and research part, which are connected, and this process of classic view of research creates new knowledge in the discipline. And the common cooperation of theoretical and research part of didactic leads to practical application of new knowledge in the learning process. This basic problem creates the row of the other problematic situations, which are deforming situation in the field of subject didactic. One problem (especially in Czech Republic and Slovakia) is lack of professionals in subject didactic. Many academicians in the field of subject didactic are not didacticians, but only experts in the other subjects, who have not got the possibility to work on their field of study, so they are in the function of the didactician. For example, it is possible to see, that expert in nuclear physics works in the field of didactic

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of physics. So, if any person has not got any theoretical and empirical knowledge about the subject, they cannot create adequate and required work environment, where all conditions will be fulfilled for the professional function as a didactician. Other problem is in the mission of subject didactic, many academicians in this field of study are focused on the preparation of future teachers and work with curriculum. This activity creates a big gap in the formatting of subject didactic as a scientific discipline, because the research level is missing and without this, we cannot determine the effect of learning material, didactic methods, forms, approaches on the pupils, if they have got permanent or ephemeral effect, if they have got the influence on the motivation, values, attitudes, opinions on pupils and students. Without these things, it is impossible to move subject didactic forward and some subjects will be still unpopular. Above are described only some actual problems of subject didactic, many of other ones are possible to find in the published articles (e.g., Ariza et al., 2016).

The problems described above are only the basic ones, the subject didactic in many countries has to overcome a long way to be a scientific discipline without any misunderstandings "what really subject didactic is". We believe, that once subject didactic of any subject will be a scientific discipline exempted from inauspicious influences.

References

- Ariza, Y., Lorenzano, P., & Adúriz-Bravo, A. (2016). Meta-theoretical contributions to the constitution of a model-based didactics of science. *Science & Education*, 25(7), 747-773. https://doi.org/10.1007/s11191-016-9845-3
- Entwistle, N. (2003). Concepts and conceptual frameworks underpinning the ETL project. Occasional Report 3. Universities of Edinburgh: Coventry and Durham.
- Gascón, J., & Nicolás, P. (2017). Can didactics say how to teach? The beginning of a dialogue between the anthropological theory of the didactic and other approaches. *For the Learning of Mathematics*, 37(3), 9-13. https://eric.ed.gov/?id=EJ1162121
- Hillen, S. A., & Landis, M. (2014). Two perspectives on e-learning design: A synopsis of a US and a European analysis. *The International Review of Research in Open and Distributed Learning*, 15(4), 209-225. https://doi.org/10.19173/irrodl.v15i4.1783
- Londal, K., & Greve, A. (2015). Didactic approaches to child-managed play: Analyses of teacher's interaction styles in kindergartens and after-school programmes in Norway. *International Journal of Early Childhood*, 47(3), 461-479. https://doi.org/10.1007/s13158-015-0142-0
- Perig, A. V. (2018). Didactic student-friendly approaches to more effective teaching of the fundamentals of scientific research in a digital era of scientometrics. *Eurasia Journal of Mathematics, Science and Technology Education*, 14(12), Article em1632. https://doi.org/10.29333/ejmste/97188

Received: May 31, 2021 Accepted: June 06, 2021

Cite as: Kubiatko, M. (2021). Subject didactics: Relevant issues. *Problems of Education in the 21st Century*, 79(3), 340-342. https://doi.org/10.33225/pec/21.79.340

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