

Nikola V. Mijanović¹

University of Montenegro in Podgorica, Faculty of Philosophy in Nikšić, Nikšić, Montenegro

Scientific review

Paper received: Jul 1 2021 Paper accepted: Feb 14 2023 Article Published: Apr 20 2023

Constructivism as a Contemporary Teaching Paradigm

Extended summary

In traditional teaching based on the didactic paradigm of the early primary and subject-teaching system, the essence of the teaching and learning process is focused on the literal memorization and reproduction of the content by the students, in the center of which is the teacher's verbal activity and the indisputable authority of the teacher. Contrary to that concept, in the process of the flexibly organized teaching based on the constructivist paradigm, the focus of the students' educational activity is shifted from the sphere of teaching (passive listening and memorization of content) to the field of active learning, by means of experimentation, research, and identification of the cause-and-effect connections and relationships among the studied objects and phenomena. The overall knowledge is based on students' individual perception, memory, thinking, imagination, discovery and logical reasoning. This actually means that constructivist teaching is focused on the process of acquiring purposeful knowledge and skills, adopting positive attitudes, cultural values and competences, with maximum use and development of the cognitive, affective, psychomotor, and experiential potentials of each individual. Therefore, the aim of this paper is the description and critical analysis of the traditional system of teaching and, based on these findings, the elaboration of the concept, essence, possibilities, advantages, and limitations of a relatively new one - on a constructivist-based didactic paradigm. Given that this is a theoretical paper, a descriptive scientific research method was used during its conception, design and elaboration and combined with the method of theoretical analysis with the purposeful use of the content analysis technique. On the basis of the facts and knowledge collected in this way, logical and rationally based conclusions were drawn at the end.

¹ niksi@t-com.me

Copyright © 2023 by the authors, licensee Teacher Education Faculty University of Belgrade, SERBIA.

This is an open access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0) (https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original paper is accurately cited.

In line with the chosen theoretical-methodological framework, our analysis, as many others that preceded it, strengthens the previously stated thesis according to which the direct application of constructivist theories in the teaching process is neither so new nor completely original. This is even more so if we bear in mind the fact that hints of certain expressed ideas date back to the period before our era. Another question is why this doctrine had to travel such a long, thorny, and uncertain path from its origin to its application, that is, its introduction into educational practice. Moreover, it was embodied in a special cognitive theory, introduced into pedagogical and didactic science in the 80s of the last century as a response and an ideal solution to the weaknesses of the traditional early primary and subject system of teaching based on the behavioral cognitive paradigm. This is traditional organization of teaching in which all its constitutive components (educational goals, teaching contents, forms of teacher-student interaction, teaching methods and tools, as well as the pace and rhythm of work, including educational standards and outcomes) are appropriate for the so-called average student. Basically, no one is interested in what happens in the student's head in such a lesson; whether and in what direction it changes, develops or motivates him/her to undertake new cognitive activities and efforts (Knežević-Florić, 2005). In relation to this problem, a rich psychological-pedagogical and didactic-methodological experience warns that this assumed "averageness" is highly disputed and unsustainable. For this reason, the competent theoreticians and school reformers of authority persistently searched for better and more acceptable solutions, aware of the fact that the students of one class are very different from one another in all characteristics important for successful learning and development of the psychological-physical and other potentials. In the end, it will turn out that they found refuge in the constructivist-cognitive theory and its application within the much contested early primary and subject-related system of teaching.

Unlike traditional teaching, in which the primary task of the student is to sit politely at the school desk, listen carefully and memorize the content presented by the teacher in order to reproduce it as verbatim as possible at his/her request, the constructivist-based teaching bases all educational activities on maximum engagement of all cognitive and other individual potentials of students; collaborative planning and selection of teaching goals, content and strategies, and independent solving of tasks. All this actually serves the purpose of creating an optimal environment in which new knowledge will be acquired through individual work, learning and research, i.e., experimentation, critical thinking, questioning and identifying cause-andeffect connections and relationships among the studied phenomena and processes, as well as the reconstruction of the existing knowledge and construction, rather, accumulation of the new knowledge and experience. This actually means that constructivist learning is understood as a self-innovative and non-linear process of construction, which includes an active interaction of the student with his/her environment, along with the regulated interaction between the previously acquired and new information. The efficiency and productivity of this kind of learning, among other things, is determined by the didactic and social context in which this process takes place. In this regard, some authors (Loyens & Gijbels, 2008) claim that an individual learns by constructing knowledge or generating new ideas, forming a different view of objects, events and processes that are the focus of his immediate interest. Consequently, on the basis of the knowledge derived from the elaboration of this problem, the claim has been made that the constructivist-type teaching is not focused exclusively on the result, but above all on

the process and activities of the individual that he/she undertakes in order to reach the desired achievement, i.e. the maximum development of his/her own psychological and physical potential. However, it makes sense to conclude that every cognitive-didactic paradigm has certain advantages and disadvantages. Therefore, it is obvious that this paradigm, based on theoretical-constructivist premises, is not an exception. According to this thesis, and starting from the knowledge derived from this analysis and thematically similar ones focused on the studious research and critical review of the key factors that characterize the traditional type of teaching on the one hand, and the one based on the constructivist paradigm, on the other, we can conclude that a mutually rational combination, depending on the objectively given situational conditions, needs and possibilities, most successfully strengthens individual advantages and at the same time rather marginalizes their disadvantages.

Keywords: teaching, student, teacher, teaching, learning, contextual cognition, traditional and contemporary constructivist paradigm

References

- Bruner, J. (1996). The Culture of Education. Cambridge, MA: Harvard University Press.
- Chen, C. (2003). A Constructivist Approach to Teaching: Implications in Teaching. *Computer Networking Information Technology, Learning, and Performance Journal*. 21 (2), 17–27.
- Dmitrijev, D. G. (2008). Konstruktivistički diskurs u teoriji sadržaja obrazovanja u SAD. *Pedagogija*. 63 (3), 347–356.
- Ebrahimi, N. A. (2013). Constructivist Translation Classroom Environment Survey (CTLES). *Development, Validation and Application, Translation & Interpreting.* 5 (2), 163–186.
- Džinkić, O., Milutinović, J. (2018). Ideje konstruktivizma u savremenoj školskoj praksi. *Zbornik odseka za pedagogiju*. 27 (18), 128–149. https://doi.org/10.19090/zop.2018.27.129-149
- Fosnot, C. T. & Perry, R. S. (2005). Constructivism: A psychological theory of learning. In: Fosnot, C. T. (Ed.) *Constructivism: Theory, perspectives and practice* (8–33). NewYork, NY: Teacher College Press.
- Jukić, R. (2013). Konstruktivizam kao poveznica poučavanja sadržaja prirodoznanstvenih i društvenih predmeta. *Pedagogijska istraživanja*. 10 (2), 241–263.
- Kanslelaar, G. et al. (2002). New technologies. In: Simons, R.-J., Van der Linden, J. & Duffy, T. (Eds.). *New learning* (55–82). Dordrecht: Kluwer Academic Publishers.
- Kincheloe, J. L. (2008). Critical Constructivism Primer. New York: Peter Lang Publishing.
- Knežević-Florić, O. (2005). Pedagogija razvoja. Novi Sad: Filozofski fakultet.
- Loyens, S. M. & Gijbels, D. (2008). Understanding the effects of constructivist learning environments. *Instructional Science*. 36, 351–357.
- Mijanović, N. (2008). Subjekatska pozicija učenika u vaspitno-obrazovnom procesu između deklarativnog i stvarnog. *Inovacije u nastavi*. 21 (1), 13–22.
- Milutinović, J. (2015). Kritički konstruktivizam koncepcija i mogućnosti u oblasti obrazovanja. *Nastava i vaspitanje*. 64 (3), 437–451.

- Milutinović, J. (2016). Socijalni i kritički konstruktivizam u obrazovanju. Novi Sad: Filozofski fakultet.
- Murphy, E. (1997). Constructivism: From Philosophy to Practice. Education Resource Information Center ERIC. ED 444 966. Retrieved June 20, 2021. from: https://files.eric.ed.gov/full-text/ED444966.pdf
- Mušanović, M. (2000). Konstruktivistička teorija i obrazovni process. U: Kramar, M. (ur.). *Didaktični in metodični vidiki nadaljnega razvoja izobraževanja* (28–35). Maribor: Univerza v Mariboru, Pedagoška fakulteta Mariboru.
- Nicol, D. J. & Macfarlane-Dick, D. (2006). Formative assessment and self-regulated learning: a model and seven principles of good feedback practice. *Studies in Higher Education*. 31 (82), 199–218.
- Palmer, D. (2005). A Motivational View of Constructivist informed Teaching. *International Journal of Science Education*. 27 (15), 1853–1881.
- Perkins, D. N. (1992). Technology meets constructivism: Do they make a marriage?. In: Duffy, M. & Jonassen, D. H. (Eds.). *Constructivism and the technology of instruction: A conversation* (45–55). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Ravitz, J. L., Becker, H. J. & Wong, Y. T. (2000). *Constructivist-Compatible Beliefs and Practices among U.S. Teachers*. Center for Research on Information Technology and Organizations University of California, Irvine And University of Minnesota /online.
- Richardson, V. (1997). Constructivist teaching and teacher education: Theory and practice. U: Richardson, V. (Ed.). *Constructivist teacher education: building new understandings* (3–14). Washington, DC: Falmer Press.
- Richardson, V. (2003). Constructivist pedagogy. Teachers College Record. 105 (9), 1623–1640.
- Schweiser, S. (2007). In history of ideas, constructivist pedagogy stems from German idealism. *Electroneurobiologia*. 15 (4), 63–94.
- Stears, M. (2009). How social and critical constructivism can inform science curriculum design: A Study from South Africa. *Educational Research*. 51 (4), 397–410.
- Topolovčan, T. i sar. (2017). Konstruktivistička nastava. Zagreb: Učiteljski fakultet.
- Vadeboncoeur, J. (1997). Child development and the purpose of education: A historical context for constructivism in teacher education. U: Richardson, V. (Ed.). *Constructivist teacher education: building new understandings* (15–37). Washington, DC: Falmer Press.
- Vigotski, L. S. (1974). Mišljenje i govor. Beograd: Nolit.
- Von Glasersfeld, E. (2003). *Radical constructivism. A way of knowing and learning.* London: Routledge Publication.