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SPECIFICITY OF THEORETICAL CONCEPTUALISATIONS OF COOPERATIVE LEARNING

Abstract: The progressive pedagogical and didactic concepts developed since the beginning of the 20th century were the basis on which the current conceptualizations of cooperative learning have been developed. This paper problematizes the recognition, i.e. lack of recognition, of the specifics of theoretical frameworks underlying the concept of cooperative learning relevant for the understanding and explanation of this phenomenon. The research aims to analyse the specificity of the theoretical frameworks on which the concept of cooperative learning is based. The research method chosen was that of theoretical analysis. Different viewpoints have been established among the leading theoreticians in this field regarding the knowledge about cooperative learning, which should be integrated into a comprehensive conceptual framework. The specifics of these theoretical conceptualizations of cooperativeness point to different contextual frameworks in which cooperative learning is viewed. In the concluding remarks, the *social interdependence theory* has been identified as the one that yielded the largest number of practical solutions in the process of implementing cooperative learning and relevant empirical research, which makes it the most fruitful theoretical conceptualization in this field.

Keywords: theory, teaching methods, cooperative learning, social interdependence theory.

Introductory considerations

“Without an appropriate theory, research tends to be “mindless empiricism” and practice tends to be static and stagnant.”

(David Johnson & Roger Johnson)

The term ‘theory’ derives its origin from the Greek noun *theoria*, which means watching, observing, viewing, surfacing of what exists the most (Potkonjak and Šimleša, 1989). The Greek verb *theorein* (to theorise) consists of two combined root words, *thea* and *horan*. The term *thea* refers to the aspect in which something is manifested. The above context refers to the concept of idea (mind) rather than directly perceived segments of things. The term *horan* means to watch carefully and observe a thing closely (Heidegger, 1977).

In modern science, theory, in its essence, is seen as an outline of pure possibilities and a priori structures that can be empirically verified and practically applied as hypotheses (Potkonjak and Šimleša, 1989). From this perspective, theoretizing consists of considering and studying phenomena in order to understand and explain their essence. In a broader context, when theoretical conceptualizations of cooperative learning are in question, „a theory consists of a set of interrelated concepts, definitions, and propositions that explain or predict events or situations by specifying relations among variables“ (Johnson & Johnson 2015). In accordance with the stated point of view, it can be concluded that theories are of a dynamic nature because they can change according to the changes studied by theorists.

Without an appropriate theoretical basis, the results of empirical research on cooperative learning cannot provide complete explanations of phenomena in the sphere of educational activity. In order to achieve the most comprehensive impact on education, empirical research must be based on appropriate theories that allow the obtained results to be understood in a more complete conceptual framework.

The discussion about the pedagogical relevance of communication and cooperation among people in the process of learning and the functioning of the social system is rooted in the views of ancient philosophers. Socrates practised controversy in a certain problem with students through group discussions. Plato emphasised that free citizens must be taught to cooperate and communicate with each other (Platon, 2013). For Aristotle, man was by nature a political being (*zoon politikon*) who could express his essence only within a community (Aristotel,

1988). The importance of cooperation among students in the educational context was emphasised by Mark Fabius Quintilian and Jan Amos Comenius. Cooperation-based teaching appears as a product of reform pedagogy from the beginning of the twentieth century (Potkonjak, 2003). Starting from John Dewey's idea that learning is a concomitant phenomenon of shared life (Djui, 1970), Georg Kerschensteiner, Célesten Freinet, William Kilpatrick and others, began to introduce different types of student cooperation in classes into the teaching system.

In addition to the aforementioned points of view, the pedagogical theory and practice of cooperative learning finds its support in certain theories of social psychology and the findings of research conducted in this area (Terhart, 2001). Consequently, in the sixties of the twentieth century, during the period of intensification of empirical research in the mentioned area, assumptions about the great value of cooperative learning started being re-established (Pljakić, 2019). The combination of the old pretensions of reform (progressive) pedagogy and new theoretical concepts form a strong foundation on which cooperative learning is based and developed throughout the world.

Research methodology

This study is focused on examining the theoretical specificities of cooperative learning and its conceptual definition. The guiding question of this research is: are the specificities of the theoretical viewpoints that contribute to the understanding and explanation of this phenomenon recognized in the field of cooperative learning?

The aim of the research is to examine the specifics of the theoretical frameworks on which the concept of cooperative learning is based. The data processing and interpretation of the results was carried out in accordance with the set tasks, which are:

1. Analyse and interpret the theoretical frameworks of cooperative learning as seen by the leading theoreticians in this field.
2. Based on the analysis of the relevant definitions of cooperative learning, identify the key elements of this concept.

In accordance with the aim and tasks of the research, the method of theoretical analysis was chosen. Content analysis was applied as an appropriate research technique. For this purpose, foreign and domestic pedagogical, psychological and sociological literature was used. The epistemological assumptions of the research are set within the interpretive paradigm. The aim of

the study, which is multidisciplinary by its character, was achieved within the framework of draft fundamental pedagogical research.

Research results and interpretation

The study of content of the leading theoreticians' works in the field of cooperative learning (Johnson, 2003; Johnson & Johnson 2005; 2009; 2015; 2021; Johnson, Johnson, Smith, 2014; Johnson, Johnson, Roseth, Shin, 2014; Slavin, 1980; 1996; 2011; 2014; Slavin, Hurley, Chamberlain, 2003) has shown that they do not fully agree with regard to the theories essential for understanding and explaining this phenomenon. The experts in this area do not establish a consensus on the above mentioned issue as the „[...] adherents of each perspective tend to approach the topic without reference to the body of similar work from other perspectives“ (Slavin, 2011).

David and Roger Johnson (Johnson & Johnson 2015) take four basic theoretical starting points for the conceptualization of cooperation in the learning process: *Behavioural-Learning*, *Cognitive-Development*, *Social-Cognitive* and *Social Interdependence theories*. Their concise conceptual framework is presented in *Figure 1*. They are middle-range theories.

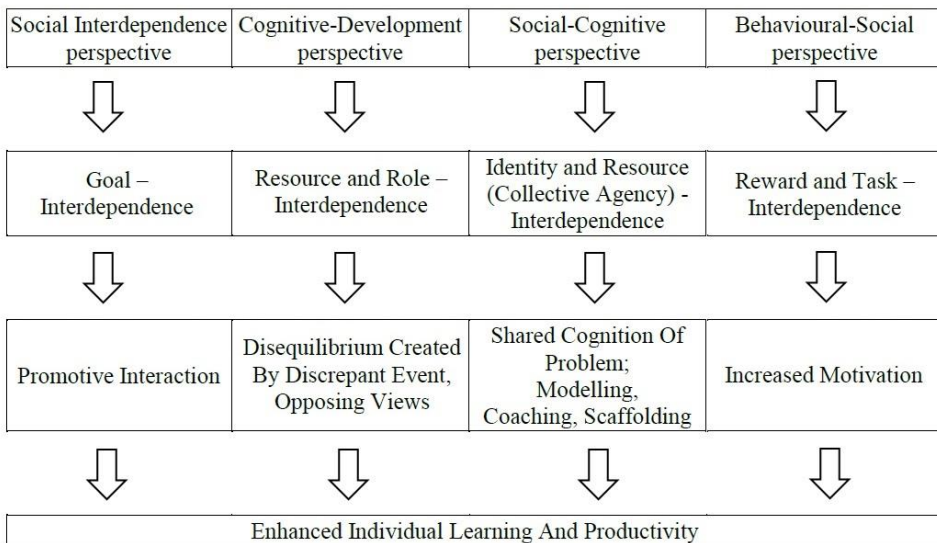


Figure 1. General theoretical frameworks of cooperative learning (Johnson & Johnson 1989)

The analysis of the content has led us to the conclusion that, in addition to the aforementioned theoretical conceptualization, there are also partly different points of view according to which, besides the already mentioned cognitive developmental, social-cognitive and social interdependence theories, *Cognitive Elaboration Perspectives* are to be included (Slavin, 1996; 2011; 2014; Tran, 2013), as well as the *Constructivist Learning Theory* (Tran, 2013). In that context, Robert Slavin (Slavin, 1996) also emphasises the *Social Cohesion Perspectives*, including cooperative learning in a partly broader theoretical framework – from Durkheim’s concept of “social integration”, through Kurt Lewin (Levin, 1948) and Deutsch’s (Deutsch, 1949) concept of “social interdependence”, to the standpoints of theoreticians such as James Moody and Douglas White (Moody & White, 2003) and their concept of the “sense of togetherness”. In terms of understanding the relation between cooperative teaching and academic performance, Robert Slavin (Slavin, 1983a; 1983b; 1996) is particularly interested in the importance of theoretical standpoints in which motivation is seen as the most influential factor of the learning process, known as the “*Motivational Perspective*”.

On the other hand, the Johnsons emphasise the behaviourist point of view as one of the keys to understanding cooperative learning. However, it should be noted that the theoretical conceptualization offered by Slavin (Slavin, 1980; 1996; 2003; 2011; 2014) aims to explain a more specific relationship between cooperative learning and student achievement. Based on the above, it can be concluded that making a comparison between the views of the Johnsons and Slavin would not be well grounded, in order not to be exclusive towards either of them. The Johnsons have selected the most important theories that, in principle, explain the phenomenon of cooperation in the educational context. In contrast to them, Slavin points out theoretical viewpoints which, in his opinion, are more suitable for explaining the effects of cooperative learning on academic achievement.

Of all the mentioned theoretical standpoints, the *social interdependence theory* has offered the largest number of practical solutions in the process of implementing cooperative learning and relevant empirical research. It should be noted that, apart from the behaviourist approach, there is complementarity between the remaining theoretical points of view, regarding the understanding of the importance of reciprocity of interactions between members of groups that achieve academic goals through the process of cooperative learning.

Based on the analysis of the relevant literature (Bramlett, 1994; Johnson & Johnson, 2009; McCafferty et al., 2006; Olsen & Kagan, 1992), a large number of

definitions of cooperative learning were recorded, which do not differ much from each other, at least when considering key elements of this concept. By analysis through the perspective of the explained theoretical conceptualizations, it can be said that cooperativeness in teaching refers to the type of social interaction between teachers and students, as well as among the students in a group (Pljakić and Tadić, 2021). This definition is in line with the previous definitions of social interaction in the pedagogical literature, which view it as a process "[...] in which there are mutual relations between two or more persons whose experience and behaviour are mutually conditioned and dependent" (Potkonjak and Šimleša, 1989: 282). The aforementioned interdependence is based on the fact that the behaviour of an individual or a group is a reaction to the action of others, but it is also a stimulus for others. Thus, cooperative learning implies an interactive teaching strategy in which students work in groups formed with the aim of ensuring positive internal interdependence which enables them to perform group tasks successfully (Johnson & Johnson, 2009; Johnson, Johnson, Smith, 2014).

Conclusion

Starting from the early ambitions of progressive pedagogical and didactic conceptions, the question arose on recognizing the specificity of the theoretical viewpoints on which the explanation and understanding of the concept of cooperation is based.

Based on the analysis and interpretation of the leading theoreticians' viewpoints, it has been established that they differ in the area of theoretical conceptualization of cooperative learning. The Johnsons (Johnson & Johnson 2015) single out four key theoretical starting points for the conceptualization of cooperation: behavioural, cognitive-developmental, social-cognitive, and the theory of social interdependence. On the other hand, Robert Slavin (Slavin, 2011; 2014) and Van dat Tran (Tran, 2013) emphasise the contribution of social elaboration theory, while not considering the behaviourist standpoint to be significant for the conceptualization of cooperativity. Slavin (Slavin, 1996) also stresses the importance of theoretical viewpoints in which motivation is seen as the most influential factor in the learning process.

The specificities of the mentioned theoretical conceptualizations of cooperative learning do not point to their confrontation, but rather to different contextual frameworks in which cooperative learning is viewed. The Johnsons explain cooperativeness in a broader educational context, while Slavin explains it through a more specific relationship between learning and achievement. One more

important conclusion derived from the applied theoretical analysis concerns the fact that *the theory of social interdependence* has been recognized as the most fruitful theoretical conceptualization in this field since it has produced the largest number of practical solutions in the process of implementing cooperative learning and relevant empirical research. With the exception of the behavioural-learning perspective, all the theoretical standpoints are complementary in terms of understanding the importance of reciprocity of interactions among students through the process of cooperative learning. In contrast to the dominant transmissive conception of teaching, cooperative learning, characterised by its focus on the student, can be seen as a modern didactic approach characteristic of a progressive school (Tadić, 2019) based on (inter)active learning.

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SPECIFIČNOSTI TEORIJSKIH KONCEPTUALIZACIJA KOOPERATIVNOG UČENJA

Sažetak: Progressivne pedagoško-didaktičke koncepcije razvijane od početka 20. veka bile su osnova na kojoj su se razvile aktuelne konceptualizacije kooperativnog učenja. U radu se problematizuje priznavanje, odnosno nepriznavanje specifičnosti teorijskih okvira u osnovi koncepta kooperativnog učenja relevantnih za razumevanje i objašnjenje ovog fenomena. Cilj istraživanja je analiza specifičnosti teorijskih okvira na kojima se zasniva koncept kooperativnog učenja. Odabrana metoda istraživanja bila je teorijska analiza. Među vodećim teoretičarima u ovoj oblasti utvrđena su različita gledišta u pogledu znanja o kooperativnom učenju, koje treba integrisati u sveobuhvatan konceptualni okvir.

Specifičnosti ovih teorijskih konceptualizacija kooperativnosti ukazuju na različite kontekstualne okvire u kojima se kooperativno učenje posmatra. U zaključnim napomenama, teorija socijalne međuzavisnosti je identifikovana kao ona koja je dala najveći broj praktičnih rešenja u procesu implementacije kooperativnog učenja i relevantnih empirijskih istraživanja, što je čini najplodonosnijom teorijskom konceptualizacijom u ovoj oblasti.

Ključne reči: teorija, nastavne metode, kooperativno učenje, teorija socijalne međuzavisnosti.