UDC 378

CONTENT ANALYSIS OF TERMS «COOPERATIVE LEARNING» AND «COLLABORATIVE LEARNING» (WITHIN THE RESEARCH ON FUTURE LANGUAGE TEACHERS' TRAINING FOR COOPERATIVE LEARNING IMPLEMENTATION)

M. V. Baida, teacher

Ivan Franko Zhytomyr State University, Zhytomyr, Ukraine

Summary. The article deals with the problem of defining the meaning of terms «cooperative learning» and «collaborative learning» by means of content analysis of definitions of the terms in authentic articles and books. The analysis is conducted within the framework of PhD research on future language teachers' training in the usage of cooperative learning.

Keywords: content analysis; cooperative learning; collaborative learning; language teachers.

Introduction

Future language teacher's training is a current problem in modern Ukrainian society. A demand for innovative methods and techniques which are able to boost language education emerges, and, as a result, the need for teachers capable of implementing the innovations is quite topical. Cooperative and collaborative learning occupy one of the leading places among innovative methods that have a high potential in language education (Bruffee K., Cohen E., Johnson R. & D., Kagan S., McConnel D., Olsen R. E., Roschelle J., Sharan & Sharan, Slavin R., Teasley S. etc.).

In the course of investigation of peculiarities of future language teachers' training in the usage of cooperative learning we came across a great variety of definitions of terms «cooperative» and «collaborative» learning in different subject areas. From the perspective of our research, it is of overall importance to work out definitions of both terms which could be applied to the training of future language teachers. We have chosen a method of content analysis to fulfill this task. The *aim* of this article is to present a process of defining mentioned above terms by means of content analysis.

Content analysis

Content analysis as a method of research is being investigated by many scientists (Berelson B., Green B., Holsti O., Ivanov V., Krippendorff K., Semenov V., Khylko M. etc.). Under the term «content analysis» B. Berelson understands a research technique for an objective, systemic and quantative description of a content of communication (Berelson, 1952) [1, p. 74]. B. Green defines content analysis as an objective method used to classify and quantify qualitative information through the use of categories (Green, 2004) [5, p. 82–91]. According to Ukrainian researcher in the field of education O. Dubaseniuk, there should be the following steps in content analysis of an educational concept: selection of topic, objectives and hypothesis, and the creation of a working body for analysis (samples of articles, excerpts with target categories); identification of categories, concepts and units for analysis, contextual units and units for evaluation; creation of a table, evaluation and analysis of the results and creation of the definition on the basis of the findings [3, p. 200–221].

The categories for analysis may be words, themes, contextual units (sentences), concepts [6]. In our research we deal with words, concepts and contextual units (sentences). «Words are the smallest units for analysis, whereas concepts are words grouped into conceptual clusters that constitute …variables in a typical research hypothesis» [10]. As a category of analysis

a series of simple questions is used, the answers to which are selected from sample definitions. The responses make a logical semantic unity that gives us possibility to calculate each of these repeated words or their synonyms. This is done with respect to the principle of statistical significance. The analyzed text segments are of homogeneous semantic plan, which enables us to use the principle of formalization [7]. Principles of formalization and statistical significance are applied for the effective conduct of the content analysis [3, p. 200–221]. We have followed these principles and have undertaken the above mentioned steps in the process of content analysis of terms «cooperative» and «collaborative» learning.

Procedure

Cooperative and collaborative learning methods have been investigated by a lot of scholars in various contexts. For our investigation, we have selected only the articles and book excerpts that deal with various aspects of the usage of cooperation and collaboration in the language learning and teaching, both in the first language (native) and in foreign languages (Bruffee K. A., Cohen E., Deutsch M., Gillies R. M., Johnson D., & Johnson J., Kagan S., Millis B., Olsen Oxford R. L., R. E., Panitz T., Paz Dennen V., Sharan S., Schrage M. etc.).

The *topic* constitutes the main *concepts* under investigation, which are *«cooperative learning»* and *«collaborative learning»*. The *objective* is to create working definitions of both concepts in order to use them in a thesis research. *Hypothesis* has been formulated that cooperative and collaborative learning are the same type of small group-work which requires cooperation between group members. For the analysis of concept «cooperative learning» we have selected 18 sources and for «collaborative learning» − 17 ones (*working body for analysis*), among which are definitions from encyclopedia and educational dictionary, articles and book excerpts. The definitions are grouped into a table. Examples of typical definitions which have been used for analysis are presented below (*Tables 1, 2*).

Table 1

Definitions of Cooperative Learning

Number	Definition	Author	Reference
1.	Cooperative learning is well recognized as a pedagogical practice that promotes learning, higher level thinking, prosocial behaviour, and a greater understanding of children with diverse learning, social and adjustment needs.	Cohen E. (1994)	Cohen E. (1994) Restructuring the classroom: conditions for productive groups, *Review of Educational Research*, 64: 1–35 [2]
2.	Cooperative learning is defined as «group learning activity organized so that learning is dependent on the socially structured exchange of information between learners in groups and in which each learner is held accountable for his or her own learning and is motivated to increase the learning of others»	Olsen R. E. W-B., & Kagan S. (1992)	Olsen R. E. W-B., & Kagan S. (1992). About cooperative learning, in *Cooperative language learning: A teacher's resource book*, ed. C. Kessler, Englewood Cliffs, N. J.: Prentice Hall, pp. 1–30 [8]

Series of simple questions are used as categories for analysis (e. g. What? Which? For what purpose?), the answers to these questions are found within the scope of selected definitions. The answers to these questions and their rep-

etition create the material for evaluation. The answers are registered in the table. Taking into consideration the fact that the number of definitions for analysis is comparatively small we used one table for both the development of category apparatus and registration of themes, units and concepts.

Table 2

Definitions of Collaborative Learning

Number	Definition	Author	Reference
1.	Collaborative learning refers to learning processes in which learning takes place in a small group with an interactive social environment through cooperative processes for common academic purposes and shared learning tasks	Erdem M.	Erdem M. (2009) Effects of learning style profile of team on quality of materials developed in collaborative learning processes. *Active Learning in Higher Education* 10(2): 154–71 [4]
2.	Collaborative learning is a learning method that uses social interaction as a means of knowledge building	Paz Dennen V.	Paz Dennen V. (2000)Task structuring for online problem based learning: A case study. *Educational Technology & Society*, 3(3) [9]

The table consists of five columns. First column shows the process of creation of the definition of the concept «cooperative learning». The second one indicates a number of words and word combinations, third one – contains a category apparatus, the fourth one shows the frequency of the usage of the item among authors, the fifth one shows this frequency in the percents.

According to the results of the analysis cooperative learning is: **what?:** a type of group-work (5 authors, 27,77 %), educational strategy (3 authors, 16,66 %), pedagogical practice (2 authors, 11,11 %), method (2 authors, 11,11 %); **which?/ during which?:** members of the group work together in small groups (7 authors, 38,88 %), collaboration is structured (4 authors, 22,22 %); **for what purpose?:** mutual help in learning (4 authors, 22,22 %), optimization of interaction and collaboration (3 authors, 16,66 %), structuring collaboration (3 authors, 16,66 %), optimization of each other's learning (2 authors, 11,11 %).

Thus, **cooperative learning** is an educational strategy based on group-work and, the main feature of it is a *structured collaboration* of all members of each small group with the purpose of mutual help in the process of learning and optimization of interaction.

The same procedure is applied to the process of analysis of collaborative learning. The results are presented in Table 4.

The resulting definition is as follows, **collaborative learning** is a type of learning process when two or more individuals with complementary skills interact to solve common academic purposes, to explore a significant question or to create a meaningful project.

Hence, the starting hypothesis is not confirmed as although the definitions of both concepts are very similar, there is some difference, which lies in the fact that cooperative learning is a more structured type of group-work. Besides, in collaborative learning, common solution of an academic task is stressed more than in cooperative learning.

Category apparatus design of concept «cooperative learning»
and registration of units for analysis

Working definitions of cooperative learning	Number	Category apparatus	Number of authors	~%
Cooperative learning is ...		**What?**		
	1.	a situation	1	5,5 %
	2.	a usage	1	5,5 %
	3.	an educational strategy	3	16,66 %
	4.	a pedagogical practice	2	11,11 %
	5.	an approach	1	5,5 %
	6.	a cooperative work	1	5,5 %
	7.	a type of group-work	5	27,77 %
	8.	a process	1	5,5 %
	9.	a method	2	11,11 %
Cooperative learning is a type of group-work ...		**Which?/During which?**		
	1.	students work in small groups	7	38,88 %
	2.	promotes learning	1	5,5 %
	3.	requires positive interdependence	1	5,5 %
	4.	optimizes socialization	1	5,5 %
	5.	collaboration is structured	4	22,22 %
	6.	common goal is achieved	2	11,11 %
	7.	interaction and collaboration is optimized	1	5,5 %
Cooperative learning is a type of group-work during which students work in small groups ...		**For what purpose?**		
	1.	mutual help in learning	4	22,22 %
	2.	optimization of each other's learning	2	11,11 %
	3.	development of higher level thinking	1	5,5 %
	4.	optimization of education and socialization	1	5,5 %
	5.	structuring collaboration	3	16,66 %
	6.	reaching common goal	2	11,11 %
	7.	optimization of interaction and collaboration	3	16,66 %
	8.	mutual responsibility	1	5,5 %

Conclusions

The results of content analysis show that both cooperative learning and collaborative learning are types of group-work, however cooperative learning requires structured collaboration in a small group with the purpose of mutual help in the process of studies and optimization of interaction, whilst collaborative learning requires less controlled interaction to explore some academic problem. In other words, cooperation is more controlled by a teacher and collaboration is less controlled. Though the definitions are quite close in meaning the analysis shows that there is a slight difference which allows them to be used on different levels of educational process, with different age groups and with different outcomes.

Category apparatus design of concept «cooperative learning»
and registration of units for analysis

Working definitions of cooperative learning	Number	Category apparatus	Number of authors	~ %
Collaborative learning is ...		What?		
	1.	a coordinated, synchronous activity	1	5,88
	2.	a method of teaching and learning	2	11,76
	3.	an act of working	1	5,88
	4.	an approach	2	11,76
	5.	a reflexive dialogue	1	5,88
	6.	a type of learning	3	17,65
	7.	a process	5	29,41
	8.	a philosophy of interaction	2	11,76
Collaborative learning is a type of learning process ...		Which?/During which?		
	1.	two or more individuals with complementary skills interact / work together	5	29,41
	2.	self-directed groups working together	2	11,76
	3.	helps students become members of the knowledge communities	1	5,88
	4.	learning takes place in a small group with an interactive social environment	1	5,88
	5.	small groups with an interactive social environment cooperate	3	17,65
	6.	social interaction is used as a means of knowledge building	3	17,65
	7.	students are given more power over their learning than in traditional instruction	2	11,76
Collaborative learning is a type of learning process when two or more individuals with complementary skills interact ...		For what purpose?		
	1.	to create a shared understanding/to create or produce something	2	11,76
	2.	to solve a common learning task/to solve common academic purposes and shared learning tasks	7	41,17
	3.	creation of a means of knowledge building	1	5,88
	4.	to explore a significant question or create a meaningful project	2	11,76
	5.	of acculturating students into the immediate community of learners and the wider world of the target language and culture	2	11,76
	6.	to construct and maintain a shared concept of a problem	3	17,65

Bibliography

1. Berelson B. Content Analysis in Communication Research. – New York: The Free Press, 1952. – P. 74.

2. Cohen E. Restructuring the classroom: conditions for productive groups // *Review of Educational Research* – 1994. – № 64. – P. 1–35.

3. Dubaseniuk O. Content analysis method in the system of psychological and educational investigations, in *Methodology of scientific investigations,* ed. D. Chernilevskiy, O. Dubaseniuk, et al, 2nd ed. – Vinnitsa, AMSKP, 2010. – P. 200–221.

4. Erdem M. Effects of learning style profile of team on quality of materials developed in collaborative learning processes // *Active Learning in Higher Education.* – 2009. – № 10(2). – P. 154–71.

5. Green B. Personal construct psychology and content analysis // *Personal Construct Theory and Practice.* – 2004. – № 1. – P. 82–91.

6. Introduction to content analyses. Retrieved on 3/15/2014 from: http://depts.washington.edu/uwmcnair/chapter11.content.analysis.pdf.

7. Manaiev O. Content analysis – description of the method. http://psyfactor.org/lib/kontent.htm Accessed 2/16/2014.

8. Olsen R. E. W-B., & Kagan S. About cooperative learning, in *Cooperative language learning: A teacher's resource book,* ed. C. Kessler, Englewood Cliffs, NJ: Prentice Hall. – 1992. – P. 1–30.

9. Paz Dennen V. Task structuring for online problem based learning: A case study // *Educational Technology & Society.* – 2000. – № 3(3).

10. Sanders W., and Pinhey T. K. The conduct of social research. – New York: Holt, Rinehart and Winston, 1959. – P. 19.