

COLLABORATIVE LEARNING IN THE ENGLISH CLASSROOM: CHARACTERISTICS, CONDITIONS AND TECHNIQUES

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Lucrul în grup, prin colaborare, constituie o parte importantă a unei lecții reușite. Obiectivul principal al lucrului în grup este de a-i implica cât mai activ pe elevi în procesul de învățare atunci când există un scop comun acceptat de toată clasa. Gruparea permite elevilor să lucreze împreună pentru a eficientiza învățarea proprie și pe a altora. Pentru ca o grupare în vederea învățării prin colaborare să fie eficientă și pentru ca timpul rezervat lecției să fie folosit în mod adecvat, elevii trebuie să aibă responsabilități clare potrivit rolului fiecăruia în realizarea obiectivelor definite ale grupului și să conștientizeze necesitatea atingerii lor.

The concept of collaborative learning, the grouping and pairing of students for the purpose of achieving an academic goal has been widely researched and advocated throughout the professional literature. The term „collaborative learning” refers to an instruction method in which students at various performance levels work together in small groups toward a common goal. The students are responsible for one another's learning as well as their own. Thus, the success of one student helps other students to be successful [1].

According to Gerlach, „Collaborative learning is based on the idea that learning is a naturally social act in which the participants talk among themselves” [2].

There are many approaches to collaborative learning. A set of assumptions about the learning process underlies them all:

1. Learning is an active process whereby students assimilate the information and relate this new knowledge to a framework of prior knowledge.
2. Learning requires a challenge that opens the door for the learner to actively engage his/her peers, and to process and synthesize information rather than simply memorize and regurgitate it.
3. Learners benefit when exposed to diverse viewpoints from people with varied backgrounds.
4. Learning flourishes in a social environment where conversation between learners takes place. During this intellectual gymnastics, the learner creates a framework and meaning to the discourse [3].

Collaborative learning (CL) is instruction that involves students working in teams to accomplish a common goal, under conditions that include the following elements:

1. **Positive interdependence.** Team members are obliged to rely on one another to achieve the goal. If any team members fail to do their part, everyone suffers consequences.
2. **Individual accountability.** All students in a group are held accountable for doing their share of the work and for mastery of all of the material to be learned.
3. **Face-to-face promotive interaction.** Although some of the group work may be parcelled out and done individually, some must be done interactively, with group members providing one another with feedback, challenging one another's conclusions and reasoning, and perhaps most importantly, teaching and encouraging one another.
4. **Appropriate use of collaborative skills.** Students are encouraged and helped to develop and practice trust-building, leadership, decision-making, communication, and conflict management skills.
5. **Group processing.** Team members set group goals, periodically assess what they are doing well as a team, and identify changes they will make to function more effectively in the future [4].

There are five essential components that must be present for small-group learning to be truly collaborative. They are (a) clear, positive interdependence among students, (b) regular group self-evaluation, (c) interpersonal behaviours that promote each member's learning and success, (d) individual accountability and personal responsibility, and (e) frequent use of appropriate interpersonal and small group social skills [5].

Collaborative learning is a situation in which two or more people learn or attempt to learn something together [6]. More specifically, collaborative learning is based on the model that knowledge can be created within a population where members actively interact by sharing experiences and take on asymmetry roles [7].

According to Slavin, for effective collaborative learning, there must be „group goals” and „individual accountability” [8]. When the group's task is to ensure that every group member has learned something, it is in the interest of every group member to spend time explaining concepts to group mates. Research has consistently found that students who gain most from cooperative work are those who give and receive elaborated explanations [9]. Therefore, this study incorporated both „group goals” and „individual accountability”. The post-test grade was made up of two parts. Fifty per cent of the test grade was based on how that particular group performed on the test. The test points of all group members were pooled together and fifty per cent of each student's individual grade was based on the average score. The remaining fifty per cent of each student's grade was individual. This was explained to the students before they started working collaboratively.

As we become more involved in using collaborative learning, we discover what radical questions it raises. Collaborative learning goes to the roots of long-held assumptions about teaching and learning. Classroom roles change: both teachers and students take on more complex roles and responsibilities [10]. The classroom is no longer solo teacher and individual students- it becomes more an interdependent community with all the joys and tensions and difficulties that attend all communities. This degree of involvement often questions and reshapes assumed power relationships between teachers and students, (and between students and students), a process that at first can be confusing and disorienting [11].

Collaborative Learning happens when students work together or are made to work together in pairs or groups:

- to understand or „make” meaning „of” a concept or text
- to create a solution for a problem (given in class or self-discovered)
- to explore a topic, a question, an area of knowledge
- to apply the principles learned in their curriculum
- to conceive of new ways to apply the knowledge they have learned in class
- to construct a tangible article or a physical object (for example, a report, a term-paper, a model volcano, a recycled-paper bag, a solar panel, an electric vehicle) out of the course-learning [12].

It should be mentioned that there are three key conditions for effective collaborative learning:

1. **Group composition**

One factor that determines the efficiency of collaborative learning is the composition of the group. This factor is defined by several variables: the age and levels of participants, the size of the group, the difference between group members, etc. Regarding the number of members, small groups seem to function better than large groups in which some members tend be 'asleep' or excluded from interesting interactions. Regarding the participants, some developmental level is necessary to be able to collaborate, but this is only an issue for children and does hence not directly concern current distance education activities which mainly concern adult learners. The most intensively studied variable is the heterogeneity of the group. It refers to the objective or the subjective differences (how subjects perceive each other) among group members. These differences can be general (age, intelligence, development, school performance) or task specific. Results indicate there exists some 'optimal heterogeneity', i.e. some difference of viewpoints is required to trigger interactions, but within the boundaries of mutual interest and intelligibility. When participants join the group on their own decision, there is no control of heterogeneity. If the tutor observes too much homogeneity among the group members, he may modify some conditions in order to activate anyway the mechanisms that normally rely on heterogeneity. He may for instance allocate role to participants which will inevitably create conflict or provide them with contradictory information.

2. **Task features**

The effects of collaboration vary according to the task. Some tasks prevent the activation of the mechanisms described above, while other tasks are appropriated. For instance, some tasks are inherently distributed and lead group members to work on their own, independently from each other. Interaction occurs when assembling partial results, but not during each individual's reasoning process. Without interaction, none of the described mechanisms can be activated. Some tasks are so straightforward that they do not leave any opportunity for disagreement or misunderstanding. Some tasks do not involve any planning and hence create no need for mutual regulation. Some tasks cannot be shared, because they rely on processes (e.g. perception) which are not open to introspection or on skills (e.g. motor skills) that leave no time for interaction.

Task features also include the environment in which the task has to be performed. This is especially important in computer-based tasks. The software features may modify interactions among learners. For instance, if a computer-based task provides the learner immediately with a feed-back on their actions, it may prevent them to discuss the consequences of their action

3. Communication media

Whatever task and group members have been selected, the collaboration may not work because the medium used for communication is not adequate. It would be beyond the scope of this paper to describe each available media. Basically, most of current widely available Internet-based tools use text-based communication, synchronous or asynchronous, with mostly fixed graphics and images. Voice and video interaction or voice and video mail are of course available, but the overload of standard networks and the limits of currently available hardware have postponed their larger use in current distance education [13].

Effective communication and collaboration are essential to becoming a successful learner. It is primarily through dialogue and examining different perspectives that students become knowledgeable, strategic, self-determined, and empathetic. Moreover, involving students in real-world tasks and linking new information to prior knowledge requires effective communication and collaboration among teachers, students, and others. Collaborative learning affords students enormous advantages not available from more traditional instruction because a group--whether it be the whole class or a learning group within the class--can accomplish meaningful learning and solve problems better than any individual can alone.

There are various possibilities of techniques for group processing – some particular ones are shown as follows:

Think-pair-share: The teacher poses a question and gives students about a minute to think through an appropriate response. Students then turn to a partner and share their responses. During the third step, student responses can be shared within a four-person learning team, within a larger group, or with an entire class during a follow-up discussion.

Three-step interview: Students are asked to form dyads and interview each other. Then, they switch roles. The dyad links with a second dyad. This four-member learning team then discusses the information or insights gleaned from the initial paired interviews.

Simple jigsaw: The teacher divides an assignment or topic into four parts with all students from each *learning team* volunteering to become „experts” on one of the parts. *Expert teams* then work together to master their fourth of the material and also to discover the best way to help others learn it. All experts then reassemble in their home *learning teams* where they teach the other group members.

Send-A-Problem: Each member of a group generates a problem and writes it down on a card. Each member of the group then asks the question to other members. If the question can be answered and all members of the group agree on the answer, then that answer is written on the back of the card. If there is no consensus on the answer, the question is revised so that an answer can be agreed upon. The group puts a Q on the side of the card with the question on it, and an A on the side of the card with an answer on it. Each group sends its question cards to another group. Each group member takes ones question from the stack of questions and reads one question at a time to the group. After reading the first question, the group discusses it. If the group agrees on the answer, they turn the card over to see if they agree with the first group's answer. If there again is consensus, they proceed to the next question. If they do not agree with the first group's answer, the second group write their answer on the back of the card as an alternative answer. The second group reviews and answers each question in the stack of cards, repeating the procedure outlined above. The question cards can be sent to a third, fourth, or fifth group, if desired. Stacks of cards are then sent back to the originating group. The sending group can then discuss and clarify any question.

This is a technique that can be used as a way to get groups to discuss and review material, or potential solutions to problems related to content information [14].

Guided Reciprocal Peer Questioning: The teacher conducts a brief lecture in class and then provides a list of open-ended questions. Students are then given a few minutes to individually prepare several content-specific questions aided by these open-ended questions (eg: *What is the main idea of...?*, *What if...?*, *How does...affect...?*, *What is a new example of...?*) The students form groups and take turns asking their questions and discussing possible answers. Alternatively, the teacher can assign reading prior to class and provide the open-ended questions as a take home worksheet.

This technique provides students with higher order open-ended questions to generate a focused discussion in a small group setting [15].

Numbered heads together: The teacher divides the students into groups of four and gives each one a number from one to four. Then he poses a question or a problem to the class. The students gather to think about the question and to make sure everyone in their group understands and can give an answer. The teacher asks the question and calls out a number randomly. The students with that number raise their hands, and when called on, the student answers for his or her team. Class time is usually better spent because less time is wasted on inappropriate responses and because all students become actively involved with the material [16].

It is important to note that incorporating collaborative learning in a course does not mean that small group work must be used all of the time. One needs to consider the course objectives, the teacher's style, the students' experience level, and the complexity of the course to determine when it is and is not appropriate to embrace group work. What is important is not how much or how little lecturing is done in the classroom, but rather how active the students' learning process is. Learning cannot occur with passive students [17].

References:

1. Johnson R.T., & Johnson D.W. (1986). Action research: Cooperative learning in the science classroom // *Science and Children*, 24, 31-32.
2. Gerlach J.M. (1994). Is this collaboration? – In: Bosworth K. and Hamilton S.J. (Eds.). *Collaborative Learning: Underlying Processes and Effective Techniques*, New Directions for Teaching and Learning no.59.) It is through the talk that learning occurs.
3. Smith B.L., and MacGregor J.T. (1992). What is collaborative learning? – In: Goodsell A.S., Maher M.R., and Tinto V. (Eds.). *Collaborative Learning: A Sourcebook for Higher Education*. - National Center on Postsecondary Teaching, Learning, & Assessment, Syracuse University.
4. Johnson D.W., Johnson R.T. and Smith K.A. (1991). *Cooperative Learning: Increasing College Faculty Instructional Productivity*, ASHE-ERIC Higher Education Report no.4. - George Washington University.
5. Johnson D.W., Johnson F.P. (1994). *Joining Together: Group Theory and Group Skills*. MA: Allyn and Bacon.
6. Dillenbourg P. (1999). *Collaborative Learning: Cognitive and Computational Approaches*. *Advances in Learning and Instruction Series*. - New York, NY: Elsevier Science, Inc.
7. Mitnik R., Recabarren M., Nussbaum M., & Soto A. (2009). Collaborative Robotic Instruction: A Graph Teaching Experience // *Computers & Education*, 53(2), 330-342.
8. Slavin R.E. (1989). Research on cooperative learning: An international perspective // *Scandinavian Journal of Educational Research*, 33(4), 231-243.
9. Webb N. (1985). Student interaction and learning in small groups: A research summary // *Learning to Cooperate, Cooperating to Learn*, 148-172.
10. Finkel D.L. and Monk G.S. (1983). Teachers and Learning Groups: Dissolution of the Atlas Complex. – In: C.Bouton and R.Y. Garth (Eds.) *Learning in Groups*. *New Directions for Teaching and Learning*, no.14. - San Francisco: Jossey-Bass.
11. Romer K. and Whipple W. (1990). Collaboration across the Power Line. - *College Teaching*, 39 (2).
12. <http://www.brighthub.com/education/k-12/articles/69801.aspx>
13. Dillenbourg P. (1999). *Collaborative Learning: Cognitive and Computational Approaches*. *Advances in Learning and Instruction Series*. - New York, NY: Elsevier Science, Inc.
14. <http://www.gdrc.org/kmgmt/c-learn/strategies.html>
15. <http://www.wcer.wisc.edu/archive/cl1/cl/doingcl/peerqst.htm>
16. <http://www.teachervision.fen.com/group-work/cooperative-learning/48538.html#ixzz1M8Fzc0b9>
17. Bonwell C.C. and Eison J.A. (1991). *Active learning: Creating excitement in the classroom* (ASHE-ERIC Higher Education Report No.1). - Washington, DC: The George Washington University, School of Education and Human Development.

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