COLLABORATIVE LEARNING: AN INNOVATIVE APPROACH FOR LEARNING & ASSESSMENT

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Abstract

Collaborative Learning / Collaborative Learning is gaining recognition from past three decades. Collaborative learning is an arrangement of learners of different abilities and interests who learns in small groups usually to complete a project or solve a problem.it can also be said as Peer learning. It is not easy for students to learn when they are in isolation. Indeed, students must overcome isolation in order to learn to write. Collaborative learning exercises—such as peer review workshops, collaborative assignments, group presentations, collaborative papers, discussion groups, and so on, which encourages active learning. Many institutions are now promoting active learning and providing opportunities for students to formulate their own questions, explain their views and discuss issues. The effective use of Collaborative Learning can help the learners to become a better learner, assess, praise and support other's learning. The present paper will look onto the advantages and disadvantages of Collaborative learning and how this instructional method can be used more effectively in classrooms.

Keywords: Collaborative Learning, Active Learning, Peer Learning

Introduction

If someone comes to you ask you what is learning. Most probably you answer him: memorisation of facts? Acquiring Skills? Being taught by a teacher how to do something? Irrespective of your description of learning, most likely it will be a process of activity in which an individual gains knowledge in a schooling setting- of course supported by a "knowledgeable" teacher. Now let's take a step back from formal to informal learning and consider how toddlers interact with their parents. Do we consider parents as teachers? Yet, children learn from the interaction with a parent. Moreover they learn from the interaction with other children- or as L.S. Vygotsky (1978/1930) puts it: ***Learn from their more knowledgeable peers***. As soon as children start attending schools, however learning gradually ceases to be a social process. Throughout primary, middle and high school – all the way up to higher education- learning becomes more and more a collaborative activity,. At present most learning in educational settings is focussed on the individual and the individual is supposed to acquire knowledge and show mastery of a skill. Most of the time we collaborate and coordinate our efforts with colleagues or we work in multidisciplinary project teams with other group members that have a variety of skills and educational- as well as personal- backgrounds .

Active Learning: Active Learning is an umbrella term that is invented by Jose Castillo and it refers to several models of instruction that focus the responsibility of learning .These active learning excercises are: Class discussion, think pair

share, short written exercises, collaborative learning groups, student's debate, reaction to a video, class game.

Peer Learning: In general, peer learning may adapt constructivist or discovery learning methods for the peer-to-peer context: however, peer learning typically manifests constructivist ideas in a more informal way, when learning and collaboration are simply applied to solve some real shared problem.

Collaborative Learning: as popularly known as a situation in which two or more people learn or attempt to learn something together .Unlike individual learning it is a spectrum of instruction that involves small groups of students who have been assigned an academic goal.

Related Literature

Collaborative learning as said by Johnson and Johnson 1975 and Slavin (987); It involves social interpersonal process by which a small group of students work together (i.e. cooperate and work as a team)to complete an academic problem-solving task designed to promote learning.(i.e. get actively involved and participate in problem solving).

Collaborative activities enhances learning by allowing individuals to exercise ,verify, solidify and improve their mental models through discussions and information sharing during the problem solving process(i.e. while working on the assigned academic task).Several studies have reported the effectiveness and benefits of collaborative learning in higher education. Collier (1980) summarizes several reports of increased students involvement with the course material and with each other as they work together in small groups in performing an academic task. Numerous studies have shown that increased student involvement in the learning process promotes problem solving and critical thinking skills. For example, Bligh(1972) reviewed close to 100 studies of student learning at the college level. He concludes that students who interacts with other students and are engaged in discussion of their ideas are less likely to have irrelevant or distracting thoughts and spend more time in synthesizing and integrating ideas and concepts compared with students who listen to lectures. Kulik and Kulik (1979) reviewed the research on college teaching method effectiveness. They conclude that student discussion groups (a form of learning) are more effective than the lecture method in promoting student problem solving skills. Similarly, Mc Keackie et al. (1987) observed that working in interacting groups facilitates student's acquisition of critical thinking skills and meta-cognitive learning strategies (i.e., self-monitoring and learning how to learn. Smith (1977; 1986) studied college classes in a variety of disciplines and found that collaborative procedures (student-student interactions) are related to higher levels of critical and active thinking and lower levels of rote memorization.

In the foreward to a book on the Power of peer learning by Jean. H. Guilmette, Maureen O'Neil, then president of Canada's International Development Research Centre, states that

"Our experience has proven that [peer learning] is an efficient way to transmit knowledge across a wide range of groups or regions. Peer learning, based on jointly generated evidence, is also an effective means to build capacity and foster scientific excellence. The body of knowledge it generates is a powerful tool for the development of evidence-based policy."

Guilmette suggests that peer learning is useful in the development context because

"It is my view that managing networks, especially those that are made up of sovereign nations, is fundamentally different from managing companies, organizations, or ministries that fall under a single authority. In essence, the dominant management approach for companies and institutions rests on cybernetics, with the view of keeping communications and accountability simple and clear. Managing methods that are successful in such a context [are] counterproductive when managing networks."

Connection with Social Constructivism

Throughout our schooling and in social practices most of us gradually acquire skills to work together and collect our individual efforts to construct a shared product, whether it takes place in a school or outside school

Social constructivism originates from constructivism that emphasises the active knowledge construction process that learners are engaged in. Social constructivism refers to a broad collection of theoretical perspectives of learning that share a fundamentally socially grounded and situated view of the learning process, e.g. " Cognitive Apprenticeship" (Brown ,Collins & Duguid,1989), 'Socially Shared Cognition'(Resnick,1990) and 'Situated Learning' (Lave & Wenger,1991).As Bereiter (2002) points out- The mind is not a container. Learning is not a process of pouring isolated knowledge objects in an individual; instead an individual should learn the skills needed to make sense of the world.

Considering these historical roots, social constructivism can be seen as a renewed interest in the social dynamics of everyday life and the natural position of social processes with regard to learning. Educational Psychology Professor Alison King explains in "Promoting Thinking Through Peer Learning" that peer learning exercises as simple as having students explain concepts to one another are proof of social constructivism theory at work; the act of teaching another individual demands that students "clarify, elaborate on, and otherwise re conceptualize material."

Connections with Constructivism

John Dewey in his book Democracy and Education, wrote, "Education is not an affair of 'telling' and being told, but an active and constructive process." Later in an essay, entitled "Experience and Education" Dewey went into detail about the science of child development and developed the basic Constructivist theory that knowledge is created through experience, rather than passed down from teacher to student through rote memorization. Soviet psychologist Lev Vygotsky, who developed the concept of the Zone of Proximal Development, was another proponent of constructivist learning: his book, *Thought and Language*, provides evidence that students learn better through collaborative, meaningful problem-solving activities than through solo exercises.

Carl Rogers' "Personal Thoughts on Learning" **focus on the individual's experience of effective learning**, and eventually conclude that nearly the entire traditional educational structure is at odds with this experience. Self-discovered learning in a group that designates a facilitator is the "new approach" Rogers recommends for education.

Connections with Connectivism

Connectivism is a theory of learning which proposes that the knowledge we can access by virtue of our connections with others is just as valuable as the information carried inside our minds. It is similar to Social learning Theory that

proposes that people learn through contact. To be added it is a learning theory for digital age.

Advantages or Special Purposes

1. Learners learn from one another, learn the material covered at a deeper level and feel better about themselves and their interactions with their peers.
2. Collaborative learning can be used successfully with a variety of other teaching strategies.
3. Learners learn valuable social skills such as resolving conflict, problem solving, criticizing ideas and not people, paraphrasing, asking questions, giving direction to the group's work.
4. Learners learn trust building, communication and leadership skills from which they benefit for the rest of their lives in the work place, or in relationships.
5. Learners usually enjoy working together because they are actively involved in the learning process.
6. The teacher's role changes from being in the front of the room doing most of the work and all of the talking, to being a facilitator of learner learning, monitoring and collecting data on learner performance, as well as intervening when the group needs assistance in doing the task or learning to work together more effectively.
7. When in place, processing skills help learners learn effective conflict resolution which improves group functioning in the future.

Disadvantages or Limitations

1. Collaborative learning requires training, experience, of 2-3 years on the part of instructor to use these techniques expertly and to facilitate learning.
2. Sometimes groups finish work at different times. Sometimes learners argue or refuse to do the work. Some learners don't know how to get along with others and settle their differences. Some learners want to work alone.
3. Initially, the teaching of collaborative/social skills takes up a great deal of class time, affecting the amount of content covered.
4. Some learners do not like to work in groups. If individual accountability is not in place, some learners do all of the work and the other group members let them.
5. Collaborative learning does not work well in easy lessons.
6. Processing skills take time to learn and to carry out in the classroom. Conflicts may arise for which the instructor may not be prepared.
7. Working in collaborative groups creates a level of "noise" that may be uncomfortable for some instructors.

Guidelines for Maximum Utilization

The instructor should understand the basic elements of a good collaborative learning lesson before attempting to do it in their classrooms.

1. Create a sense of positive interdependence in the groups so that learners feel mutually connected to each other. This may be done by:
   a) Structuring a group goal or task that all group members must work toward, such as completing a single product or paper that is representative of the group's efforts.
   b) Assigning individual roles such as researcher, checker, synthesizer, recorder, etc. “These roles specify responsibilities the group needs to complete in order to accomplish the task.

c) Structuring group rewards or bonus points that provide incentive for working together. Everyone is rewarded or no one is rewarded.
d) Creating an "outside enemy" where groups are in friendly competition with each other, scores from past groups, or the clock.
e) Limiting the resources (such as using only one book, one pencil, or one worksheet) in the group so that they must be shared.
f) Creating a physical environment (such as moving desks close together, sitting on the floor in a certain section of the room, or sitting at one end of a table) where the group is designated to work together so they are positioned knee to knee and eye to eye.
g) Structuring a division of labor in the task so that one part of the work must be done before the next part is started.
h) Creating an identity in the group (such as developing a group name, motto, cheer, logo, or flag) that makes the group unique and creates a sense of belonging and connectedness.
i) Creating a fantasy situation where learners imagine they are in a life or death emergency (such as deciding how to survive after being stranded on the moon, in the desert, such as pretending to be the world's best scientists whose task is to end world hunger) that are serious, but not real, e.g *Simulation/Gaming.)*

2. Another essential element of collaborative learning is the structuring of individual accountability in the groups. There are several means by which instructors can structure individual accountability in their collaborative groups. They may randomly call on one or more members of the group to give and explain the group's answers, or give an individual exam or quiz on the material covered by the group. Other ways include asking all group members to sign their signatures to the group's work indicating their agreement with the group's answers, having members use different colored pens for writing their individual answers, or randomly selecting one worksheet from the group for evaluation.
3. A third essential element of collaborative learning is the teaching of interpersonal and small group skills. These skills are necessary for learners to learn and use if the group is to collaborate, resolve conflict, enjoy working together, and effectively and efficiently perform the tasks asked of them. These collaborative, small group social skills (such as communication, leadership, trust-building, conflict management, and decision making skills) need to be taught as precisely and purposely as any other academic skills. The instructor also needs to collect data regarding the learners ' use of these skills on an observation sheet for giving feedback to the group during the processing. Learners must see the need for using the skills, be taught how to do them, and then be given ample opportunities for practice and perseverance in using the skills until they are internalized. This can be time consuming and frustrating.
4. The final basic element in collaborative learning deals with processing the group's effectiveness in using the prescribed social/collaborative skills and how well they accomplished the academic task assigned. This is a time of reflection for the instructor and the group. If learners are to learn from their experience in working together, they must reflect on that experience.

Summary

Collaborative learning is not the easiest way to teach, but when used effectively, will help learners be better learners, praise and support each other's learning, and develop necessary social/collaborative skills for use in problem solving. Teaching learners to work collaboratively will help prepare them for the world of

work and the team building necessary to succeed. Creating a sense of positive interdependence within the groups helps the members feel connected to each other and their learning.

To be an effective instructor of collaborative learning requires time, training, practice and support from colleagues, parents, and administration. It is best to go slowly, be well prepared, and let collaborative learning evolve into a teaching style. Research indicates that collaborative learning activities typically result in: (a) team-building spirit and more supportive relationships; (b) greater psychological well-being, social competence, communication skills and self-esteem; and (c) higher achievement and greater productivity in terms of enhanced learning outcomes. Although collaborative learning strategies are valuable tools for educators to utilise, it is obvious that simply placing students in groups and telling them to 'work together' is not going to automatically yield results. The teacher must consciously orchestrate the learning exercise and choose the appropriate vehicle for it. Only then will students in fact engage in collaborative learning and reap the benefits discussed above.

Suggestions for Additional ideas in Collaborative Learning

In order to reap the full benefits of the method Collaborative Learning, instructors may employ following suggestions:

1. Collaborative Research Assignments
2. Group presentations
3. Collaborative papers
4. Discussion Groups
5. Evaluating peer excercises.

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