

Cooperative Learning: A Pathway to develop 21st Century Skills in the Learners

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Abstract

The need for a well-prepared workforce that is able to succeed in the 21st century has been acknowledged for more than a decade (Stuart, 1999). Increasing transformation in technology and modes of communication continue to develop, is becoming a challenge for the coming generation to become better prepared for life in a rapidly changing world. Educators need to move away from the traditional approach of teaching and bring into the classroom new and innovating approaches to teach the content and lifelong skills. The most challenging goals for 21st century learners in higher education is to enhance critical thinking, promoting “deep” (as opposed to superficial) learning, encouraging both self-esteem and the acceptance of others, and improving interpersonal effectiveness (with an emphasis on team skills). Research says that students work together and acquire 21st century skills that will help them as they find the way throughout the life from classrooms to careers. Five key elements differentiate cooperative learning from simply putting students into groups to learn viz. positive interdependence, face to face interaction, individual accountability, interpersonal and small group social skills, group processing. Thus present paper focuses on how Cooperative Learning Approach can be a pathway to develop 21st century skills in learners.

Introduction

The need for a well-prepared workforce that is able to succeed in the 21st century has been acknowledged for more than a decade (Stuart, 1999). Increasing transformation in technology and modes of communication continue to develop, is becoming a challenge for the coming

generation to become better prepared for life in a rapidly changing world. Consequently, educators will need to adapt to these changes in order to equip future generations with the skills that will be necessary in order to be successful. In today's classroom, the learners have diverse background, a variety of achievement levels, and different learning styles which will all affect their ability to acquire knowledge. Educators need to move away from the traditional approach of teaching and to bring the innovative approaches to teach the content and lifelong skills. Utilizing a variety of techniques for learners' to build their own understanding, providing real world applications and interacting with their peers in group activities which will definitely make an individual a productive contributor of the society.

A review of the literature of 21st Century Skills suggests that education must be upgraded for learners to thrive in the new global economy. Success in today's world requires the ability to access, synthesize, and communicate information; to work collaboratively across differences to solve complex problems; and to create new knowledge through the innovative use of multiple technologies. The only thing that will redeem mankind is cooperation. Today's learners are a part of networked society and to be prepared for the fast-paced, virtual workplace that they will inherit, today's generation need to be able to learn and produce cooperatively" (Pitler et al., 2007, p. 139).

The most challenging goals for 21st century learners is to enhance critical thinking, promoting "deep" (as opposed to superficial) learning, encouraging both self-esteem and the acceptance of others, and improving interpersonal effectiveness (with an emphasis on team skills). Keeping in mind the above challenges the paper describes how Cooperative Learning Approach approach can be a pathway to develop 21st century skills in learners.

21st Century Skills

Twenty-first century skills have been defined and described in a number of ways. Twenty-first-century skills are the special abilities children need to develop so that they can be prepared for the challenges of work and life in the 21st century. In a recent review of 59 international documents related to 21st century skills, Voogt and Pareja-Roblin summarized the recommended skills, describing them as "collaboration, communication, ICT literacy, and social and/or cultural competencies"

As defined by the Partnership for 21st Century Skills Framework, these skills are grouped into three major categories: Learning and Innovation Skills, which include creativity, critical

thinking, communication, and collaboration; Information, Media, and Technology Skills, which involve effectively using, managing, and evaluating information from digital technology and communication tools; and Life and Career Skills, which include flexibility and adaptability, self-direction, teamwork, appreciation of diversity, accountability, and leadership. While a 21st century education still involves mastering the content of core academic subjects, it is proposed that the teaching of the skills identified above, be infused throughout the curriculum. Twenty-first-century skills enables today's learners to be academically competitive in global situations; good citizens within their community, country, and world; and effective within their workplace. It means that education must engage new technologies, equip students with rigorous academic coursework, and foster innovation and creativity.

21st century skills can be defined as developing skills and habits of mind that allow people to actively participate in society using all forms of media available. It stems from the need to teach people how to think and reflect critically on what is happening around them and to develop creative solutions that serve personal and social needs. The National Research Council of the National Academies of Science has categorized 21st century skills into three categories:

- Cognitive skills, such as critical thinking and analytic reasoning;
- Interpersonal skills, such as teamwork and complex communication; and
- Intrapersonal skills, such as resiliency and conscientiousness (the latter of which has also been strongly associated with good career earnings and healthy lifestyles).

The above mentioned skills can be easily developed through cooperative learning approach instead of traditional learning approach.

Cooperative Learning Approach

Cooperative Learning Approach is an organizational structure in which a group of students practice academic goals through collaborative efforts. Students work together in small groups, draw on each other's strengths, and assist each other in completing a task. "Cooperative Learning Approach is the instructional use of small groups so that students work together to maximize their own and each other's learning." In Cooperative Learning Approach, students are placed in groups of two to six individuals to work on a specific task. Cooperative-learning tasks vary widely, ranging from understanding and explaining a new concept to solving a new problem, analyzing a situation, or confronting a dilemma. In a typical task, students might share individual

knowledge with their group or have specific roles to play, and the group would be jointly responsible for arriving at an agreed-upon solution.

Cooperative Learning Approach: Need of the hour

The Cooperation is desirable “Whenever problem solving is desired, whenever divergent thinking or creativity is desired, whenever quality of performance is expected, whenever the task is complex, when the learning goals are highly important, and when the social development of learners is one of the major instructional goals...”

When an instructor wishes to promote positive interaction among learners, a facilitative learning climate, a wide range of cognitive and affective outcomes, and positive relations between themselves and the learners...”

Present education system typically promotes individualism and dependence on teachers. Learners' learning individually using traditional approach is very passive; they are expected to sit back, listen, absorb, and recall. Cooperative Learning Approach actively engages the student teachers in his or her learning process by creating an opportunity for teaching and learning to occur between peers. Learners share the authority of setting goals, assess learning, and facilitate learning. They have more opportunities to actively participate in their learning, question and challenge each other, share and discuss their ideas, and internalize their learning. It improves academic learning, and also helps learners to engage themselves in thoughtful discourse and examine different perspectives, and it has been proven to increase students' self esteem, motivation, and empathy. It results in positive peer pressure on all individuals to achieve group goals. Each individual with varying ability ensures that goal can be achieved or not. The experience of Cooperative Learning Approach introduces the understanding that one needs to rely on and have cooperation with others to succeed. Researchers have found that 90 to 95% of the people who lose their jobs do so because they cannot get along with other people on the job. Only 5 or 10 percent (depending on which studies you read) of people lose their jobs because they cannot do the work. Cooperative learning helps people learn social skills and therefore increases the chances that they will be able to keep the jobs for which we are training them.

Researchers report says that cooperation typically results in higher group and individual achievement, healthier relationships with peers, more metacognition, and greater psychological health and self-esteem (Johnson and Johnson 1989).

- Students who engage themselves in Cooperative Learning Approach learn significantly more, remember it longer, and develop better critical-thinking skills than their counterparts in traditional lecture classes.
- Students love to learn through cooperative approach rather than the traditional approach which inspire them to engage in study and to cover the syllabus in time.
- Cooperative learning approach facilitates students to imbibe the social, cultural and moral values which will help them to at the workplace for the sustainable development.
- Cooperative learning approach build positive relationships among students -- important for creating a learning community that values diversity.
- Working in a group provides the kind of experiences that develop both good learning skills and social skills.
- Develops constructive and supportive peer relationship.

Cooperative Learning Approach: A pathway

Students working in groups get an opportunity to establish rapport with one another and themselves. They share feelings, thoughts, and stories (and listen as others share), they feel a better connection with the materials, themselves, and one another. Students in a group establish a sense of community and belongingness in the classroom that will open avenues for collaboration. Collaboration in the classroom is best used to create learning situations that are more open-ended. This includes some research or exploration and allows the students to apply knowledge in new and different ways. Students get engaged in possible thinking and come up with one or more answers they think could be right. Every student has different solution to a problem rather than one right solution this helps in developing creativity and critical thinking skills too. Research indicates that cooperative learning helps to produce higher achievement, increased retention, more positive relationships and a wider circle of friends, greater intrinsic motivation, higher self-esteem, greater social support, more on-task behavior, better attitudes toward teachers, better attitudes toward school. This development leads an individual to become a better citizen for tomorrow.

Research says that students work together and acquire 21st century skills that will help them as they find the way from classroom to careers. Five key elements differentiate Cooperative learning approach from simply putting students into groups to learn (Johnson et al., 2006).

Positive Interdependence:

Students when work in a group can achieve through mutual goals, division of labor, dividing materials, roles, etc. Each student depends on the performance of the rest of the group. Efforts of group members mutually benefit not only him- or herself, but all group members as well. Members of a cooperative-learning group must have incentives to cooperate. In general this is accomplished by ensuring that the group's joint goal can be accomplished only through cooperation, trust building, team work, etc.

Individual Accountability:

Students working in a group learn together, but perform alone. This ensures that no one can "hitch-hike" on the work of others. The goals must be clear enough that students are able to measure whether (a) the group is successful in achieving them, and (b) individual members are successful in achieving them as well. Individual group members must be responsible for their own learning. This element directly addresses the free-rider problem inherent in group tasks, in which individual members may tend to put in less effort and instead rely on other group members to do the work. By making students individually accountable for their own learning, and at the same time partially responsible for group success, it is natural for group members to support each other in learning the required material and accomplishing the specified task.

Face-to-Face (Promotive) Interaction:

Students promote each other's learning by oral explanations of how to solve problems, discussing the nature of the concepts being learned, and connecting present learning with past knowledge that will help learners in cognitive activities and interpersonal dynamics. Research by mathematics educators Vidakovic (1997) and Vidakovic and Martin (2004) shows that groups are able to solve problems more accurately than individuals working alone.

Members of the group become personally committed to each other as well as to their mutual goals. At some point, individual students must interact directly with peers in a way that has them explaining their own points of view. For example, they may explain how they obtained answers or suggest methods for addressing a problem. In turn, other students provide their views, comments, and assistance. This kind of interaction, in which students help each other to learn material and complete specified tasks, creates an environment that facilitates learning by all group members and develops communication skills, decision making skills, creative and critical thinking skills and problem solving too. Research shows that students receive immediate

feedback or questions about their ideas and formulate responses without having to wait for long intervals to participate in the discussion (Peterson & Swing 1985).

Interpersonal and Small Group Social Skills:

Group members learn task work and also teamwork. Thus, a group must know how to provide effective leadership, decision-making, trust-building, communication, and conflict management. In order for the face-to-face Promotive interaction to work well, the cooperative-learning group must understand and practice good social skills. Researchers found that learners involved in cooperative learning activities developed skills for interpersonal communications more readily than learners who were in other classroom settings. These skills range from basic politeness to an understanding of how group dynamics can help or hinder the group in accomplishing its objective. Moreover, such social skills must typically be learned, and thus the instructor has the responsibility of providing guidance in this regard. For example, the group needs to encourage individual members to do their share of the work. On the other hand, each student should feel free to ask for assistance if it is needed.

Group Processing:

After completing group task, members must be given time and procedures for analyzing how well their learning groups functioned and how well social skills are being employed. Group processing involves both task work and teamwork, with an eye to improving it on the next project. Students must monitor the functioning of the group as a learning unit. To do this, it is necessary for someone (teacher, group member, outside observer) to observe the group's process, comment on its effectiveness, and make appropriate suggestions for improvement. "A good give-and-take discussion can produce unmatched learning experiences as students articulate their ideas, respond to their classmates' points, and develop skills in evaluating the evidence of their own and others' positions." Thus, group processing provides a vehicle for the group to learn and improve their social skills.

Conclusion

Thus Cooperative Learning Approach encourages professional achievement, teacher-students discussion, active learning, confidence, and motivation. Use of cooperative groups to accomplish

academic tasks not only provides opportunities for students to develop interpersonal skills but also gives them authentic experiences which will help them to be successful in their career.

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