

ROLE OF EDUCATION IN SUSTAINABLE DEVELOPMENT COOPERATIVE LEARNING-GATEWAY TO SUSTAINABLE DEVELOPMENT

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Abstract:

Sustainable development is the development that meets the needs of the present, without compromising the ability of the future generations to meet their own needs. Education is the key to achieve sustainable development by using different teaching methodologies while teaching. Education for Sustainable Development is a lifelong learning process and an integral part of quality education. Education is a lifelong process, throughout life human being educate themselves through different sources and learn new things but these learned things will become lifelong only when students create and construct their own knowledge on the basis of prior knowledge. Education for Sustainable Development enhances the cognitive, socio-emotional and behavioural dimensions of learning and encompasses learning content and outcomes, pedagogy and the learning environment itself. Teaching through traditional teaching methods is not sufficient for sustainable development one should go beyond the traditional teaching which provides suitable atmosphere in the classroom to learn the concepts and sustain it for long time this can be achieved through use of cooperative learning strategies in the classroom. In this study aimed to use cooperative learning strategy to teach Science and study the effectiveness on academic achievement.

Keywords: Sustainable Development, Cooperative Learning Strategies, Academic Achievement.

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Introduction:

Delor's report has given four pillars of education like learning to know, learning to do, learning to live together and learning to be. The education given in our schools and colleges focus more on the learning to know pillar of education. For sustainable development of the child, schools and colleges should give equal importance to all the pillars of education. Education is the important tool to achieve sustainable development. ESD is a lifelong learning process and an integral part of quality education. Education encourages development of knowledge and skills required to achieve Sustainable development. Quality Education, Social equity are the goals of Sustainable development. To achieve goals of Education for sustainable development education should promotes the teaching methods which provides opportunities to the students to work in democratic atmosphere which encourages learner to respect each other, help each other to learn the concept to achieve common goals and to work with each other in more sustainable manner.

Cooperative learning is the gateway for achieving the goals of Education for sustainable development.

Cooperative learning is an instructional strategy in which class students are divided in small groups to work together on a common task. All students are accountable to complete task assigned to them to achieve common goals of the group. In cooperative learning as students are working in small groups and share common goals it is also called as small group learning. “Cooperative learning is defined as students working together to attain group’s goals that cannot be obtained by working alone or competitively.” (Johnson,Johnson,&Holubec,1986)

Elements of Cooperative Learning:

- Positive interdependence
- Individual accountability
- Face to face interaction
- Social skills
- Group processing

Techniques of Cooperative Learning:

- Jigsaw
- Think Pair and Share
- Group Investigation
- Three-minute review
- Round Robin
- Numbered Heads Together
- Circle the sage

Rationale:

Many research studies show the effectiveness of cooperative learning strategy and its benefits on different aspects at different levels. Pushpanjali & Satyaprakash (2010). Carried out research to find out effectiveness of cooperative learning on achievement motivation and anxiety. Researcher conducted research on IX standard students from Bangalore city. The findings of the study concluded that Cooperative learning strategy was more superior to conventional method in significantly promoting achievement motivation. Study conducted by Thomas Vineeta (2013) titled “A study on the effectiveness of strategy based on cooperative learning for science teaching in class VII.” concluded that Cooperative learning helped in increasing science achievement than the traditional method of teaching. Cooperative learning strategies found more effective than the traditional methods promoting higher achievement also cooperative learning develops cooperative skills, positive interdependence, communication skill, individual accountability among students which in turn encourages sustainable development. To achieve sustainable development goals one should use teaching strategies which encourages more participation of students. The present study focuses on use of cooperative learning strategies in enhancing academic achievement in science among VII standard students which helps to achieve sustainable development.

Title of the Study:

A study of effectiveness of cooperative learning strategy on academic achievement in science of VII standard students.

Objectives of the study:

- To implement the program based on cooperative learning strategy on VII standard students.
- To study the effectiveness of cooperative learning strategy on academic achievement in science of VII standard students.

Hypothesis:

There is significant difference in mean gain score of academic achievement after implementation of program based on cooperative learning strategy.

Methodology:

The study was experimental in nature. To find out the effectiveness of cooperative learning strategy on academic achievement in science of VII students, only post- test nonequivalent group design was used.

Data collection tool:

- Cooperative learning program
- Academic achievement test (Post test)

Data analysis tool:

To find out the effectiveness of cooperative learning strategy on academic achievement in science t test is used.

Results:

- After implementation of program based on cooperative learning strategy there is significant difference in academic achievement scores of control group and experimental group.
- Cooperative learning strategy found to be more effective than the traditional method.
- Cooperative learning strategy found to be effective for teaching science subject.

Conclusion:

Thus, Cooperative learning strategy found to be more effective and beneficial in learning science subject and increasing academic achievement. Cooperative learning helps in better understanding and helps to sustain the information lifelong. Cooperative learning encourages social equity and social skills and encourages students to work in democratic atmosphere. Education for Sustainable Development is a lifelong learning process and an integral part of quality education. It enhances the cognitive, socio-emotional and behavioural dimensions of learning and encompasses learning content and outcomes, pedagogy and the learning environment itself. Quality education is one of the goals of sustainable development, Cooperative learning is the gateway to attain sustainable development goals and overall development of the students.

References:

- Agarwal, J.C. (2007), *Psychology of Learning and Development*, published by Shipra publications Delhi.
- Best, J.W. & Kahn, J.V. (2010), *Research in Education* (10th ed.), PHI Learning Private Limited New Delhi.
- Chaube, S.P. & Chaube, Akhilesh. (2011), *Essentials of General Psychology* (1st ed.), Neelkamal publications Pvt.Ltd.Hyderabad.
- Mangal, S.K. (2010), *Advanced Educational Psychology* (2nd ed.), PHI Learning Private Limited New Delhi.
- Pushpanjali, B.S. & Satyaprakash, C.V. (2010, June). *Effect of cooperative Learning on achievement motivation and anxiety*. *Edutracks*, 9(10), 32-36.
- Thomas, Vineetha. (2013). *A study on the effectiveness of strategy based on cooperative learning for science teaching in class VII*. Unpublished Ph.D. thesis, Maharaja Sayajirao University, Baroda
- <https://www.sd-commission.org.uk/pages/what-is-sustainable-development.html>
- <https://www.unesco.org/en/education-sustainable-development/need-know>

Cite This Article:

Prof. Vaidya S. & Dr. Bhagyawant S. (2024) *Role of Education in Sustainable Development - Cooperative Learning-Gateway to Sustainable Development*. In *Educreator Research Journal*: Vol. XI (Issue II, pp. 377–380). ERJ. <https://doi.org/10.5281/zenodo.11070776>