



## EFFECTIVENESS OF 21ST CENTURY SKILLS (4C's) FOR SUSTAINABLE DEVELOPMENT

**\*Mrs. Minal Vijay Patil & \*\* Dr. P.B. Darade**

*\* Lecturer, Shri. Chh. Shahu Junior College of Education, Rukadi.*

*\*\* Associate Professor, Acharya Javadekar college of Education, Gargoti.*

### Abstract:

The Sustainable Development is asset of 17 goals and 169 targets. The rank of India in the Sustainable Development 2023 got a 112 rank with score 63.45 from overall 193 UN members of States. India is most signatory countries that has committed to achieving these goals. To achieve these goals Education for sustainable development is necessary. Education for sustainable development is commonly defined as the development of knowledge, skills, values and behavior required to create a sustainable world. 21st century skills are the keys to our next generation who have to face Industry 4.0. By using 21st century we can create awareness about our environment and social awareness. We have to provide curriculum which facilitate sustainable living and provide solutions towards global challenges. In this research paper Effectiveness of 21st century skills for sustainable development included. Researcher used experimental research methodology to find the effectiveness of 21st century skills activities developed knowledge of Sustainable Development.

**Keywords:** 21st century skills .Critical Thinking, Collaboration, Communication, Creativity

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### Introduction:

Sustainable development is a development that meets the needs of the present needs without compromising the ability of future generations to meet their own needs. It contains two key concepts within it.

The concepts of needs in particular, the essential needs of the world's poor ,to which overriding priority should be given and the idea of limitations imposed by the state of technology and social organizations on the environment ability to meet present and future needs.

-World Commission on Environment, Our Common Future (1987)

Sustainable Development Goal 17 is about “partnership for the goals “.These goals are established by United Nations in 2015.

### Goals of Sustainable Development

- |                               |  |
|-------------------------------|--|
| 1. No poverty                 | 10. Reduced Inequalities                   |
| 2. Zero Hunger                | 11. Sustainable Cities and Communities     |
| 3. Good Health and well being | 12. Responsible consumption and production |
| 4. Quality Education          | 13. Climate Action                         |
| 5. Gender Equality            | 14. Life below Water                       |

- |   |  |
|---|--|
| 6. Clean Water and Sanitation               | 15. Life on Land                           |
| 7. Affordable and Clean energy              | 16. Peace, Justice and Strong Institutions |
| 8. Decent Work and Economic Growth          | 17. Partnerships for the Goals             |
| 9. Industry, Innovation and Economic Growth |  |

The basic thing of sustainable development is to keep mind future needs we have to work for today needs. Using present recourses carefully and generate new products from making west to best is the main aim of sustainable development.

### 21<sup>st</sup> century skills:

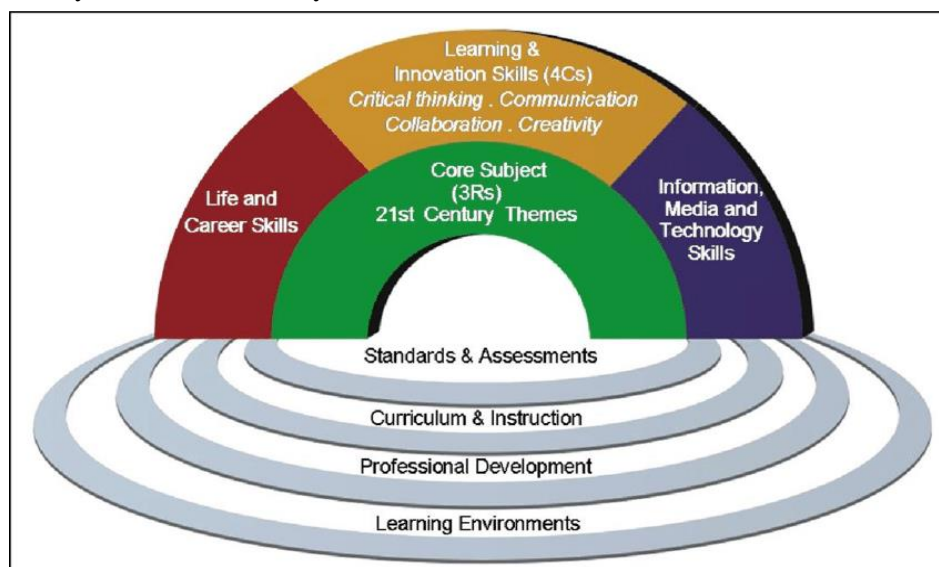
21<sup>st</sup> century skills comprise skills, abilities, and learning dispositions that have been identified as being required for success in 21<sup>st</sup> century society and workplaces by educators, business leaders, academics and governmental agencies.

[https://en.wikipedia.org/wiki/21st\\_century\\_skills](https://en.wikipedia.org/wiki/21st_century_skills)

P21, OECD, NCTE, CBSE, AICTE these institutes, each one listed different type of 21<sup>st</sup> century skills .Mainly divided into 3 types

1. Learning and innovation skill
2. Information, media and technological skill
3. Life and career skill

P21 was diagrammatically include 21<sup>st</sup> century skills as follows –



Source: (<https://files.eric.ed.gov/fulltext/ED519462.pdf>)

Peter Drucker says that “The only skill that will be important in the 21<sup>st</sup> century is the skill of learning new skills. Everything else will become obsolete over time.”

**Statement of Problem:**

Effectiveness of 21<sup>st</sup> Century Skills (4C's) For Sustainable Development.

**Objectives of Research:**

1. To find out present status about Sustainable Development.
2. To find out effectiveness of 21<sup>st</sup> Century Skills (C's) for Sustainable Development.

**Research Methodology:**

The researcher used experimental method with Pretest Posttest non equivalent quasi –experimental design. Future Research on this subject will be “Development of supportive program to enhance 21<sup>st</sup> century skills among B.Ed student teachers “.

**Sampling :**

A sample of 42 D.El.Ed students from Shri chh.Shahu Juniour College of Education ,Rukadi ,Tal- Hatkangale ,Dist –Kolhapur, was taken for the study. Purposive sampling technique was used.

**Tools for Data Collection:**

Questionnaire and Achievement Test was used to collect the data .

**Data Analysis Tools:**

Percentage, T-test and Graph were used to analyze the collected data.

**Research Procedure:**

Researcher collects the information about present status about sustainable development by using questionnaire on control and experimental group. After then researcher used 21<sup>st</sup> century skills programm as a treatment for experimental group.

**Findings of the Study:**

1. There is significance difference between means of experimental group before and after treatment with respect to achievement.
2. The achievement of the students in experimental group is greater than the achievement of the students in control group.

**Activities of 21<sup>st</sup> Century Skills (4c) for Sustainable Development**

**1. Critical Thinking Skill**

1. Each goal for each student as project work
2. Putting material of S.D and raise problems in front of them
3. Graphical Interpretation of Poverty
4. Analysis of Health Problem.
5. Present Status of Gender Inequality discussions.
6. Government Schemes and its effect.

**2. Collaboration Skill**

1. Group discussion on Local deeper problem of Hunger

2. Debate on Inequalities.
3. Guess lecture on introduction of Health remedies programs laughter club, friend group for loneliness.
4. Industrial Visit to collaboration for skill based labor for sustainable reproduction.

### 3. Communication Skill

1. Seminar and talks
2. Participation of Local Cleanup
3. Explores energy vampires
4. Information about Food Waste Projects
5. Information about Healthy goals project
6. Discussion about Clean wastage Project

### 4. Creativity

1. Zero waste material
2. Eco friendly bio fuel and electrical vehicles
3. Videos about recycling of waste materials
4. Solar equipments information

### Conclusion

The sustainable development is a major subject in today world. So we have to create ability to face future challenges. It is necessary to develop teaching learning process. This research paper explores how 21<sup>st</sup> century skills replace the traditional teaching methods .Hence Educators, administrators, parents and employers must be aware and conscious about their role in use of 21<sup>st</sup> century skills for sustainable development.

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