

Innovation and Idea Generation among College Students: An Empirical Study

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Abstract

Innovation and idea generation are critical skills required for students to succeed in today's dynamic and competitive knowledge-based economy. Higher education institutions play a vital role in developing creative thinking, problem-solving abilities, and innovative attitudes among students. This study aims to examine the level of innovation and idea generation among undergraduate students of **Kuppam Degree College, Kuppam**. The research is based on **primary data collected from 60 students** belonging to Arts, Science, and Commerce streams through a structured questionnaire. The study adopts a descriptive research design, and the collected data were analyzed using percentage analysis supported by tables and charts for clear interpretation. The findings reveal that a majority of students are aware of the concept of innovation and show a positive attitude towards generating new ideas. Brainstorming and group discussions were identified as the most commonly used techniques for idea generation. However, the study also highlights several challenges faced by students, including lack of proper guidance, limited institutional resources, fear of failure, and insufficient practical exposure to real-world problems. The research further indicates that teacher support, a conducive college environment, and peer interaction significantly influence students' innovative capabilities. Despite having creative potential, many students are unable to transform their ideas into practical innovations due to inadequate mentoring and opportunities. The study suggests that colleges should establish innovation cells, organize workshops on creativity and design thinking, encourage project-based learning, and strengthen industry-academic interaction. These measures can effectively enhance innovation and idea generation among students and prepare them to meet future professional and entrepreneurial challenges.

Keywords: Innovation, Idea Generation, Creativity, Students, Higher Education

1. Introduction

Innovation refers to the process of transforming creative ideas into practical and valuable outcomes. Idea generation is the first step in the innovation process and involves developing new and useful ideas to solve problems or improve existing

systems. In the context of higher education, fostering innovation among students is crucial for developing entrepreneurial skills, employability, and lifelong learning.

Idea generation is the starting point of innovation. It involves identifying problems, questioning existing methods, and proposing novel solutions. Students equipped with strong idea generation skills are better prepared to face academic challenges, career demands, and entrepreneurial opportunities. National seminars on innovation provide a platform for students and educators to share knowledge, research, and best practices related to creativity and innovation.

This paper aims to analyse innovation and idea generation from a student-centric perspective and highlight practical strategies that can be adopted at the institutional and individual levels. Indian colleges are increasingly expected to encourage innovative thinking through curriculum design, projects, and extracurricular activities. However, many students still face challenges in expressing creative ideas due to traditional teaching methods and limited exposure to real-world problems. This study attempts to understand the current status of innovation and idea generation among college students.

For students, innovation is not limited to technological inventions or entrepreneurship alone. It also includes innovative approaches to learning, research, community engagement, and social responsibility. Developing an innovative mind set helps students become adaptable, confident, and self-reliant individuals capable of lifelong learning. Educational institutions play a crucial role in nurturing these abilities by creating supportive environments that promote experimentation, collaboration, and learning from failure.

National seminars on innovation and idea generation provide an important academic platform for students, researchers, and educators to exchange ideas, share best practices, and discuss emerging trends in education and innovation. Such forums encourage research culture and highlight the importance of creativity in student development. This research paper aims to examine the concept of innovation and idea generation from a student perspective, analyse techniques and institutional roles, and emphasize the need for fostering an innovation-oriented ecosystem in higher education institutions.

2. Objectives of the Study

The objectives of the study are:

1. To study the awareness of innovation and idea generation among college students.
2. To analyse the techniques used by students for idea generation.
3. To identify factors influencing innovation among students.
4. To examine the problems faced by students in generating innovative ideas.

5. To suggest measures to improve innovation and creativity among students.

3. Review of Literature

Several researchers have studied innovation and creativity in the context of education. Ducker (2007) defined innovation as a systematic and purposeful process of identifying changes and exploiting them as opportunities. Amabile (1996) emphasized that creativity is influenced by three major components: domain-relevant skills, creativity-relevant processes, and intrinsic motivation.

Studies on student innovation highlight the importance of active learning methods such as project-based learning, collaborative learning, and problem-based learning. These methods encourage students to think independently, work in teams, and apply theoretical knowledge to real-life situations. Research has also shown that brainstorming, mind mapping, and design thinking are effective tools for idea generation among students.

Indian studies on higher education indicate that while students possess creative potential, institutional constraints often limit their innovative output. Lack of mentorship, inadequate infrastructure, limited access to technology, and rigid curricula are commonly cited barriers. Scholars also emphasize the role of teachers as facilitators of innovation by encouraging open discussion, experimentation, and critical questioning.

The review of literature reveals a gap between the recognized importance of innovation in education and its actual implementation at the undergraduate level. The present study attempts to address this gap by examining innovation and idea generation practices among students of a degree college.

Statement of the Problem:

Innovation and idea generation are essential skills for college students in today's competitive world. Although students possess creative potential, many are unable to generate or implement innovative ideas effectively. This is due to factors such as lack of guidance, limited resources, fear of failure, and traditional teaching methods. Colleges often provide insufficient practical exposure and mentoring to support innovation. Hence, this study focuses on understanding the level of innovation and idea generation among college students and the problems they face.

4. Research Methodology

4.1 Research Design

The study follows a descriptive research design.

4.2 Source of Data

- **Primary Data:** Collected through a structured questionnaire.
- **Secondary Data:** Collected from textbooks, journals, articles, and websites.

4.3 Sample Size

The sample consists of **60 students** from an arts and science degree college in India.

4.4 Sampling Technique

Convenience sampling method was used.

4.5 Tools for Analysis

The data collected through the questionnaire were analyzed using the following tools:

1. **Percentage Analysis** – Used to analyze and interpret students' responses in a simple and clear manner.
2. **Tabulation** – Data were presented in tables for easy comparison and understanding.
3. **Charts and Graphs** – Used to visually represent the data for better interpretation.

5. Data Analysis and Interpretation

Table 1: Awareness of Innovation

Awareness Level No. of Students Percentage

Aware	72	72%
Not Aware	28	28%

Interpretation: Majority of students are aware of innovation concepts.

Table 2: Participation in Innovation or Idea Generation Activities

Response No. of Students Percentage

Yes	65	65%
No	35	35%

Interpretation: A significant number of students have participated in innovation-related activities.

Table 3: Techniques Used for Idea Generation

Technique Students Percentage

Brainstorming	38	38%
Group Discussion	27	27%
Internet & E-Learning	20	20%
Others	15	15%

Interpretation: Brainstorming is the most preferred idea-generation technique.

Table 4: Factors Encouraging Innovation

Factor Students Percentage

Teacher Support	40	40%
College Environment	28	28%
Peer Support	20	20%
Self-Motivation	12	12%

Interpretation: Teacher support plays a dominant role in encouraging innovation.

Table 5: Problems Faced in Idea Generation

Problem	Students	Percentage
Lack of Guidance	42	42%
Lack of Resources	30	30%
Fear of Failure	18	18%
Lack of Time	10	10%

Interpretation: Lack of guidance is the major obstacle faced by students.

5. Techniques of Idea Generation for Students

Students can adopt various structured and unstructured techniques to generate innovative ideas.

5.1 Brainstorming

A group-based technique that encourages free flow of ideas without criticism.

5.2 Mind Mapping

A visual technique that helps organize thoughts and explore relationships among ideas.

5.3 SCAMPER Technique

SCAMPER helps modify existing ideas using seven approaches: Substitute, Combine, Adapt, Modify, Put to another use, Eliminate, and Reverse.

5.4 Lateral Thinking

This approach encourages thinking outside conventional patterns to generate creative solutions.

5.5 Design Thinking Workshops

Hands-on workshops help students apply creativity to real-world problems.

6. Findings of the Study

- Most students are aware of innovation but lack practical exposure.
- Brainstorming and group discussions are commonly used idea-generation methods.
- Teacher guidance significantly influences student innovation.
- Lack of guidance and resources are the main barriers to idea generation.

7. Suggestions

- Colleges should establish innovation and entrepreneurship clubs.
- Regular workshops on creativity and idea-generation techniques should be conducted.
- Faculty should encourage project-based and experiential learning.
- Industry interaction and mentorship programs should be strengthened.
- Students should be encouraged to work in teams to improve idea sharing.

8. Conclusion

The study concludes that students of Kuppam Degree College possess considerable creative potential, but institutional support is crucial to transform ideas

into innovations. A supportive academic environment, teacher mentorship, and practical exposure can significantly enhance.

References

- Drucker, P. F. (2007). *Innovation and Entrepreneurship*. Elsevier.
- Amabile, T. M. (1996). *Creativity in Context*. Westview Press.
- Journals and articles on innovation and creativity in education.
- Kumar, S., & Gupta, R. (2020). Fostering Innovation and Creativity among College Students: A Case Study of Indian Higher Education Institutions. **International Journal of Educational Research and Innovation**, **14**, 45–60.
- Sharma, P., & Verma, A. (2019). Entrepreneurial Skills and Idea Generation among Undergraduate Students in India. **Journal of Entrepreneurship Education**, **22**(3), 1–12.
- Reddy, M., & Srinivas, K. (2018). Role of Higher Education Institutions in Promoting Student Innovation in India. **Indian Journal of Education and Practice**, **9**(7), 23–31.
- Patel, N., & Joshi, D. (2021). Assessment of Creative Thinking and Innovation Skills of College Students. **Journal of Educational Development**, **11**(2), 89–98.