
Pedagogical Innovation: Evaluating Entrepreneurship Initiatives in Government School Settings

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ABSTRACT

This research study aimed to comprehensively assess the impact of entrepreneurship initiatives that were implemented in various Delhi government schools. The focus of the study was to conduct a comparative analysis of multiple case studies, each representing a successful entrepreneurship program. Through the examination of these initiatives, the research sought to uncover both commonalities and differences in their strategies, challenges faced, and outcomes achieved. A mixed-methods approach was employed, combining qualitative and quantitative methods to gather data from participating students, teachers, and program coordinators. Qualitative data was collected through in-depth interviews and focus group discussions, facilitating an understanding of the nuances of students' experiences, attitudinal shifts, and perceived skill development. Quantitative data was obtained through surveys designed to measure changes in students' entrepreneurial mindset, problem-solving abilities, teamwork skills, and aspirations. Through the comparative analysis, the study identified key factors that contributed to the success of entrepreneurship initiatives in Delhi government schools. It delved into the strategies employed by schools to effectively engage students and foster an entrepreneurial mindset. Additionally, the study investigated the challenges encountered during program implementation and the

innovative adaptations undertaken to address these challenges. The outcomes of the entrepreneurship programs were evaluated in terms of students' skill enhancement, mindset transformation, and future career aspirations. By analyzing the data collected from multiple case studies, the study provided insights into how these programs contributed to the holistic development of students, equipping them with skills relevant to the contemporary world and preparing them for entrepreneurial ventures. The study delved into successful entrepreneurship programs in Delhi government schools, highlighting shared strategies such as interactive workshops. Challenges varied, necessitating adaptations like collaborating with local businesses. Students underwent mindset shifts, showcasing improved teamwork and critical thinking skills, alongside heightened interest in entrepreneurial careers. Positive parental support correlated with increased self-efficacy, and post-program, alumni indicated sustained pursuits in entrepreneurship. The research findings offered valuable insights for educators, policymakers, and stakeholders involved in entrepreneurship education. The study not only contributed to the existing body of knowledge on entrepreneurship education but also provided practical recommendations for optimizing the design and implementation of such initiatives in other schools and similar educational contexts.

Entrepreneurship education has gained prominence as a powerful tool for nurturing innovation, economic growth, and self-reliance among the youth. In this age of rapid technological advancement and economic transformation, equipping students with entrepreneurial skills and a mindset for innovation is paramount. The Delhi government has recognized the importance of fostering entrepreneurship among its students, and as a result, has initiated various entrepreneurship programs in its government schools. Entrepreneurship education in schools has become a pivotal factor in equipping students with the skills and mindset necessary to thrive in a dynamic, innovation-driven world. The government schools of Delhi have embraced this imperative, implementing a diverse range of entrepreneurship initiatives aimed at nurturing the entrepreneurial spirit among their students. This paper represents a

comprehensive assessment of the impact of these initiatives, seeking to shed light on the strategies, challenges, and outcomes of various entrepreneurship programs within the Delhi government school system.

The National Council of Educational Research and Training (NCERT) have long been at the forefront of shaping the educational landscape in India through its curriculum development and educational policies. It is through the National Curriculum Framework (NCF) that NCERT lays the foundation for educational reforms that respond to the changing needs of society. In 2020, the Government of India unveiled the National Education Policy (NEP 2020), a landmark document that emphasizes holistic, skill-based, and innovative education as a means of preparing students for the challenges and opportunities of the 21st century. One of the key facets of NEP 2020 is the promotion of entrepreneurship education, reflecting the recognition that entrepreneurial skills are pivotal in a rapidly evolving global economy.

The city of Delhi, as the capital of India, plays a pivotal role in implementing these educational reforms. In line with the national vision, the Delhi government has undertaken various initiatives to introduce entrepreneurship education within its government schools. The implications of these initiatives are profound, not just for the students of Delhi but for the future of education across the country.

Significance of the Study

- The study aligned with the objectives outlined in the National Education Policy (NEP) 2020 and the National Curriculum Framework (NCF), demonstrating a concrete example of the implementation of policy reforms at the ground level. It highlights the real-world application of educational reforms and can serve as a model for other regions and educational institutions in India.
- The findings of the study empowered educational policymakers and administrators with insights into the effectiveness of entrepreneurship programs in government schools. It can aid in data-driven decision-making, helping authorities refine and optimize their programs to better align with the goals of the NEP.
- Understanding the impact of entrepreneurship initiatives can inform curriculum development, not only in Delhi but on a national level. The study helped in the identification of specific skills and competencies that need to be integrated into the curriculum, ensuring that students are adequately prepared for an entrepreneurial future.



- As entrepreneurship education is increasingly recognized as a means to nurture skills like critical thinking, problem-solving, and innovation, the study's findings can serve as a reference for educators. It can provide guidance on how to effectively develop and enhance these skills among students.
- By assessing how entrepreneurship programs impact students' mindset and aspirations, the study empowered students to make informed career choices? Study also inspired and motivated students to consider entrepreneurship as a viable and rewarding path, leading to greater self-reliance and economic independence.
- A focus on entrepreneurship education can contribute to economic growth and job creation, as students are better equipped to create their own businesses and employment opportunities.
- The study had implications beyond Delhi. It can serve as a reference point for other states and countries looking to enhance entrepreneurship education. The lessons learned and the challenges faced in Delhi can inform the design and implementation of similar programs globally.
- The study highlights the holistic development of students, emphasized on the importance of character education, leadership skills, and adaptability. These are qualities that are valuable not only for entrepreneurship but for success in any field.
- This study contributes to the existing body of knowledge on entrepreneurship education. It enriches the academic discourse on the impact of such programs, offered valuable insights and data for future researchers and scholars.
- In the long term, the study can contribute to the social and economic transformation of Delhi and potentially the entire nation. By fostering an entrepreneurial spirit among students, it can create a pool of innovators and problem solvers who can address societal and economic challenges.

Objectives of the Study

- To comprehensively evaluate the effectiveness of entrepreneurship initiatives implemented in Delhi government schools. This involves understanding how these programs impact students and their educational outcomes.
- To identify both commonalities and differences in strategies, challenges faced, and outcomes achieved.



- To identify the key factors contributing to the success of entrepreneurship initiatives in Delhi government schools. This involves recognizing the strategies employed by schools to engage students effectively and foster an entrepreneurial mindset.
- To investigate the challenges encountered during the implementation of entrepreneurship programs and the innovative adaptations made by schools to address these challenges. Understanding the obstacles and solutions can inform future program design.
- To evaluate the outcomes of entrepreneurship programs, focusing on students' skill enhancement, mindset transformation, and their future career aspirations. The research aims to provide a clear picture of how these programs contributed to the holistic development of students.
- To contribute to the existing body of knowledge on entrepreneurship education, enriching the academic discourse with practical insights and data that can inform future research and scholarship.

Research Questions

- What is the overall impact of entrepreneurship initiatives in Delhi government schools on students' skill development, mindset transformation, and future career aspirations?
- What are the commonalities and differences in the strategies employed by different government schools in implementing entrepreneurship programs?
- How do students experience entrepreneurship programs, and what attitudinal shifts are observed among them as a result of these initiatives?
- What are the challenges encountered by government schools in the implementation of entrepreneurship programs, and how have they adapted to address these challenges?
- What are the key factors contributing to the success of entrepreneurship initiatives in government schools?
- How do these programs effectively engage students and foster an entrepreneurial mindset?

Literature Review

Amato et al. (2016) emphasized the role of regulatory modes in entrepreneurship, suggesting that entrepreneurial success is mediated by alertness. This underscores the importance of instilling an entrepreneurial mindset in students through education. Studies conducted by Badri and Hachicha (2019)

highlighted the impact of entrepreneurship education on students' intentions to start their businesses. Such initiatives have the potential to influence students' career aspirations and empower them to consider entrepreneurship as a viable path. Barba-Sanchez and Atienza-Sahuquillo (2016) detailed the development of entrepreneurship in Spanish schools, indicating the feasibility of implementing entrepreneurship education at a national level. The experience in Spain provides insights into the practical aspects of program implementation. Further research by Barba-Sanchez and Atienza-Sahuquillo (2018) explored the role of entrepreneurship education in engineering schools, emphasizing its impact on entrepreneurial intentions. This underscores the interdisciplinary nature of entrepreneurship education and its relevance in various academic disciplines. A systematic review by Brune and Lutz (2019) provided a comprehensive overview of the impact of entrepreneurship education on entrepreneurial outcomes. The study aggregated findings from various sources to offer a holistic view of the subject. Cunningham and Menter (2020) delved into the transformative changes in higher education, examining the role of entrepreneurial universities in fostering high-technology entrepreneurship. The study underscores the evolving landscape of higher education and the need for entrepreneurial skills. Duval-Couetil (2013) discussed the challenges in assessing the impact of entrepreneurship education programs, highlighting the complexities in measuring their effectiveness. This emphasizes the need for rigorous evaluation methods. Entrepreneurship education at different academic levels was explored by Hannon (2005). The study highlighted the philosophies and challenges associated with implementing entrepreneurship education, especially in higher education. Hamalainen et al. (2018) investigated the utilization of external stakeholders in entrepreneurship education, offering insights into collaborative approaches. The involvement of external partners can enhance the practicality of entrepreneurship programs. A report on the "Impact of entrepreneurship education" (2014) provided valuable data on the impact of entrepreneurship education at the national level, highlighting key statistics and trends. Jensen (2014) examined the impact of entrepreneurship education at the humanities, emphasizing the importance of a holistic perspective in measuring outcomes. This holistic approach considers not only entrepreneurial skills but also personal development. Kirkley (2017) explored the cultivation of entrepreneurial behavior in secondary schools, emphasizing the significance of entrepreneurship education at the school level. Liguori et al. (2019) addressed under-researched domains in entrepreneurship and enterprise education, such as primary schools and vocational training programs. This suggests the diversity of contexts where entrepreneurship education can be applied. Matlay (2008) discussed the impact of entrepreneurship education on entrepreneurial outcomes, emphasizing the potential of these programs in shaping the future of aspiring entrepreneurs. Oosterbeek

et al. (2010) highlighted the impact of entrepreneurship education on skills and motivation, underscoring the multifaceted benefits of such education. Pepin and St-Jean (2019) assessed the impacts of school entrepreneurial initiatives, providing insights into the practical results of these programs. Shahin et al. (2021) explored the impact of a STEM-based entrepreneurship program on the entrepreneurial intentions of secondary school female students, indicating the potential to address gender disparities in entrepreneurship. Waraich and Chaturvedi (2017) analyzed entrepreneurship development initiatives in business schools, providing insights into the specific initiatives in Delhi and the National Capital Region (NCR). Zhou and Xu (2012) conducted a review of entrepreneurship education for college students in China, shedding light on the international scope of entrepreneurship education.

Methodology

Research Design

This study utilized both quantitative and qualitative research methods to ensure a holistic assessment of entrepreneurship initiatives in Delhi government schools.

Data Collection

Structured surveys were used to gather quantitative data from students, teachers, and program coordinators. These surveys included questions related to entrepreneurial mindset, problem-solving abilities, teamwork skills, and career aspirations. Quantitative data was collected at the beginning and end of the entrepreneurship program to measure changes in these variables over time.

In-depth interviews were conducted with students, teachers, and program coordinators to understand their experiences, challenges, and the nuances of the program's impact. These interviews were provided a deeper exploration of attitudinal shifts and skill development. Focus group discussions with participants were providing interactive discussions and gain multiple perspectives on the program's impact.

Sampling and Sampling Techniques

Purposive sampling method was used to select Delhi government schools that have implemented entrepreneurship initiatives and divide them into two groups: schools with successful programs (experimental group) and those without such programs (control group).

Data Analysis

Statistical analysis paired t-tests was used to compare pre-program and post-program quantitative data within the experimental group. Performance comparative analysis between the experimental and control groups was used to measure the impact of entrepreneurship initiatives on students' mindset, skills, and aspirations. Thematic analysis was used to identify and categorize themes and patterns in the qualitative data from interviews and focus group discussions. Triangulation was used to the qualitative findings with the quantitative results to provide a comprehensive understanding of the program's impact.

The findings were integrated from both quantitative and qualitative data to provide a holistic understanding of the impact of entrepreneurship initiatives in Delhi government schools.

Result of the Study

- Students in schools with entrepreneurship initiatives demonstrated a statistically significant improvement in problem-solving skills, teamwork skills, and communication skills. This was measured through a pre- and post-program assessment, indicating a positive impact on skill development. Students exhibited a notable shift in their entrepreneurial mindset, with increased confidence in their ability to identify opportunities and take calculated risks. Post-program surveys revealed a substantial rise in the percentage of students expressing a strong interest in pursuing entrepreneurial careers, indicating a significant influence on their future aspirations.
- The study found common strategies employed across different government schools, such as interactive workshops, guest lectures by local entrepreneurs, and hands-on projects. These strategies were consistently effective in engaging students and fostering an entrepreneurial mindset. Some schools emphasized collaboration with local businesses and community stakeholders, which appeared to enhance students' practical exposure. However, the specific choice of strategies varied based on the school's resources and the local entrepreneurial ecosystem.
- Qualitative data from interviews and focus groups indicated that students had overwhelmingly positive experiences in entrepreneurship programs. They expressed a high level of satisfaction, particularly with the practical and experiential learning components of the programs. Students reported significant attitudinal shifts, including increased self-confidence, a stronger desire to take initiative, and a greater willingness to embrace calculated risks. They also displayed improved problem-solving abilities and teamwork skills, reflecting mindset transformation.



- Common challenges included limited financial resources, the need for specialized training for teachers, and difficulties in coordinating with local businesses. Schools also faced resistance to change from some traditional stakeholders.
- Schools responded to these challenges by seeking external funding, offering teacher training programs, and establishing partnerships with local businesses and community organizations. The adaptation efforts improved the implementation of entrepreneurship programs and mitigated some of the challenges.

Key Factors

The study identified several key factors contributing to the success of entrepreneurship initiatives, including:

- Strong leadership and commitment from school administrators.
- Engaging and interactive program design.
- Collaboration with local businesses and entrepreneurs.
- Teacher training and capacity building.
- Involvement of parents and the local community in supporting students' entrepreneurial endeavors.

The programs effectively engaged students through hands-on projects, real-world challenges, and interactive workshops. Students reported a high level of motivation and enthusiasm for entrepreneurship education. These programs fostered an entrepreneurial mindset by encouraging students to think critically, identify opportunities, and develop problem-solving skills. The emphasis on practical experiences and exposure to entrepreneurial role models positively influenced students' mindset.

Findings of the Study

- Entrepreneurship initiatives in Delhi government schools resulted in a significant improvement in students' problem-solving, teamwork, and communication skills.
- Students experienced a notable shift in their mindset, showing increased confidence in identifying opportunities and taking calculated risks.
- The programs substantially influenced students' career aspirations, with a higher percentage expressing strong interest in pursuing entrepreneurial careers.



- Schools shared common strategies such as interactive workshops but adapted differently based on local resources and ecosystems, emphasizing collaboration with local businesses.
- Students reported overwhelmingly positive experiences, particularly appreciating the practical and experiential aspects of the programs.
- Schools addressed challenges by seeking external funding, providing teacher training, and forming partnerships with local businesses and community organizations.
- Success was attributed to strong leadership, interactive program design, collaboration with local businesses, teacher training, and community involvement.
- Programs engaged students through hands-on projects and interactive workshops, fostering an entrepreneurial mindset by emphasizing critical thinking and problem-solving.

Conclusion

Study demonstrated that entrepreneurship initiatives in Delhi government schools hold significant promise. Students who participated in these programs experienced a notable enhancement of their skills, particularly in problem-solving, teamwork, and communication. Moreover, these programs triggered a profound transformation in students' entrepreneurial mindset. They exhibited increased confidence in identifying opportunities and embracing calculated risks, a vital attribute for entrepreneurial success. The impact on their career aspirations was also striking, with a higher percentage expressing a strong interest in pursuing entrepreneurial careers.

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