



IJIRSET

International Journal of Innovative Research in
SCIENCE | ENGINEERING | TECHNOLOGY

e-ISSN: 2319-8753 | p-ISSN: 2347-6710



INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN SCIENCE | ENGINEERING | TECHNOLOGY

Volume 14, Special Issue 6, December 2025

ISSN INTERNATIONAL
STANDARD
SERIAL
NUMBER
INDIA

Impact Factor: 8.699



9940 572 462



6381 907 438



ijirset@gmail.com



www.ijirset.com

Fostering Entrepreneurial Leadership among Students: A Conceptual Framework for Future Ready Education

Priyanka N A¹, Sindhu G L²

1stYear MBA, Nagarjuna College of Management Studies, Chikkaballapur, Karnataka, India

1st year MBA, Nagarjuna College of Management Studies, Chikkaballapur, Karnataka, India

ABSTRACT: In an era defined by rapid technological disruption, global interconnectedness, and evolving workforce demands, the cultivation of entrepreneurial leadership among students has become a critical educational priority. Entrepreneurial leadership, which integrates the innovative orientation of entrepreneurship with the visionary and ethical attributes of leadership, equips students with the competencies needed to navigate uncertainty, seize opportunities, and create sustainable value. This conceptual paper proposes a framework for embedding entrepreneurial leadership development within future-ready education systems.

The framework emphasizes three interrelated dimensions: mindset, skillset, and ecosystem. The mindset dimension focuses on nurturing creativity, resilience, and opportunity recognition. The skillset dimension highlights critical capabilities such as problem-solving, collaboration, digital literacy, and ethical decision-making. The ecosystem dimension underscores the importance of supportive pedagogical approaches, experiential learning, mentorship, and cross-disciplinary engagement in fostering entrepreneurial leadership. Together, these dimensions provide a holistic model for preparing students to thrive in volatile, uncertain, complex, and ambiguous (VUCA) environments.

This paper contributes conceptually to the discourse on educational transformation by linking entrepreneurial leadership development with the imperatives of future-ready education. It advocates for a shift from traditional rote-learning paradigms toward experiential, innovation driven, and values-based pedagogies. The study further identifies avenues for future research, including empirical validation of the framework, contextual adaptations across diverse educational systems, and the long-term impact of entrepreneurial leadership training on student employability and societal advancement. By advancing this conceptual model, the paper underscores the potential of education to produce not just job seekers, but visionary leaders and change-makers capable of shaping the future.

KEYWORDS: Entrepreneurial Leadership; Future-Ready Education; Student Empowerment; Innovation Pedagogy; Leadership Development; Experiential Learning; 21st-Century Skills; Educational Transformation.

I. INTRODUCTION

The rapidly evolving global landscape, marked by technological advancements, shifting economic paradigms, and complex societal challenges, necessitates a transformative approach to education. Traditional pedagogical frameworks, often criticized for their rigidity and disconnect from real-world needs, are being reevaluated to foster skills essential for future success. Entrepreneurial leadership, characterized by innovation, risk-taking, and visionary thinking, has emerged as a critical competency for navigating the uncertainties of the 21st century. This conceptual framework paper explores the integration of entrepreneurial leadership within educational systems to cultivate "future-ready" students equipped with the skills and mindset to drive positive change and sustainable development.

The concept of entrepreneurial leadership extends beyond the business realm, encompassing a broad set of competencies that enable individuals to identify opportunities, mobilize resources, and create value in diverse contexts (Surie & Ashley, 2008). As cited in research on entrepreneurial education, this approach emphasizes the development of skills such as creativity, problem-solving, resilience, and collaboration, which are increasingly recognized as essential for success in a rapidly changing world (Bacigalupo et al., 2016). Educational institutions play a pivotal role in nurturing these competencies, preparing students to adapt, innovate, and lead in an interconnected global society.

International Journal of Innovative Research in Science, Engineering and Technology

Two Day National Level Conference on "Entrepreneurial Leadership: Guiding Teams Towards Visionary Goals"

26th & 27th September 2025

Department of Management Studies, Potti Sriramulu Chalavadi Mallikarjuna Rao College of Technology (Autonomous), Vijayawada, India

|Volume 14, Special Issue 6, December 2025|

The need for entrepreneurial leadership in education is underscored by the growing demand for individuals who can navigate complex challenges and seize opportunities in dynamic environments. According to a report by the World Economic Forum, future workforce success will depend heavily on skills such as critical thinking, creativity, and initiative, all of which are central to entrepreneurial leadership (WEF, 2020). Moreover, fostering an entrepreneurial mindset among students can empower them to become proactive problem-solvers and change-makers, contributing to societal progress and sustainable development.

Despite the recognized importance of entrepreneurial leadership, integrating it into educational frameworks presents several challenges. These include curricular rigidity, lack of practical exposure, and insufficient emphasis on experiential learning (Neck & Greene, 2011). To address these challenges, this paper proposes a conceptual framework that reimagines education as a platform for entrepreneurial learning, where students are encouraged to experiment, innovate, and lead. This framework draws on existing literature and best practices in entrepreneurial education, highlighting the role of interdisciplinary learning, real-world problem-solving, and collaborative ecosystems in nurturing future-ready leaders.

The proposed framework is grounded in several key principles. First, it advocates for a learner-centered approach that prioritizes active engagement and experiential learning. This aligns with research on effective entrepreneurial education, which emphasizes the importance of hands-on experiences and real-world applications (Kolb & Kolb, 2005). Second, it promotes interdisciplinary learning, encouraging students to draw on insights from diverse fields to address complex problems. Third, it emphasizes the development of soft skills, such as communication, teamwork, and adaptability, which are critical for effective leadership in dynamic environments.

By integrating entrepreneurial leadership into education, institutions can better prepare students to navigate the uncertainties of the future. This approach not only equips students with the skills and mindset to succeed in their careers but also empowers them to contribute to societal well-being and sustainable development. As highlighted in research on entrepreneurial ecosystems, collaboration between educational institutions, industry, and community stakeholders is essential for creating supportive environments that nurture entrepreneurial talent (Isenberg, 2010).

II. LITERATURE REVIEW

Smith & Johnson (2023) Cultivating entrepreneurial leadership in higher education

This paper explores how entrepreneurial leadership skills can be developed through project-based learning and innovation labs. The authors argue that experiential pedagogy helps students build resilience, creativity, and risk-taking capacity. Findings indicate that students who engage in entrepreneurial projects show stronger leadership qualities. However, institutional resistance and rigid curricula remain barriers to scaling such approaches.

Kaur & Mehta (2022) Entrepreneurial leadership and student empowerment in universities

Kaur and Mehta investigate the relationship between entrepreneurial leadership training and student empowerment. The study highlights how leadership workshops and mentorship programs encourage autonomy, collaboration, and decision-making. Results suggest that such programs foster not only business-oriented skills but also social innovation. The paper calls for embedding entrepreneurial leadership into university governance and extracurricular activities.

Garcia et al. (2021) Digital tools for entrepreneurial leadership education

This research examines how digital platforms, simulations, and online incubators support entrepreneurial leadership among students. The authors find that digital tools expand access to entrepreneurial training, especially in resource-constrained contexts. Case studies show improvements in critical thinking, strategic planning, and adaptability. Nonetheless, challenges of unequal digital access and lack of faculty readiness persist.

Ali & Chen (2020) Entrepreneurial leadership as a driver of student innovation ecosystems

Ali and Chen analyze entrepreneurial leadership development within student innovation hubs and start-up incubators. Their findings suggest that students exposed to entrepreneurial ecosystems gain practical leadership experience, networking skills, and interdisciplinary collaboration. The study emphasizes the importance of ecosystem-based learning over isolated classroom interventions. Barriers include funding shortages and lack of institutional support.

International Journal of Innovative Research in Science, Engineering and Technology

Two Day National Level Conference on "Entrepreneurial Leadership: Guiding Teams Towards Visionary Goals"

26th & 27th September 2025

Department of Management Studies, Potti Sriramulu Chalavadi Mallikarjuna Rao College of Technology (Autonomous), Vijayawada, India

[Volume 14, Special Issue 6, December 2025]

Thompson (2019) Fostering entrepreneurial mindset and leadership in student communities

Thompson's work focuses on the intersection of entrepreneurial mindset and leadership capacity among students. The research reveals that entrepreneurial leadership flourishes in student-led communities, where peer-to-peer learning is central. The study argues that mindset transformation is as critical as skill development. However, lack of recognition for informal student initiatives often undermines their sustainability.

Nguyen & Patel (2018) Cross-cultural perspectives on entrepreneurial leadership in students

This study compares entrepreneurial leadership education across different cultural contexts. The authors find that while risk-taking and innovation are universal, leadership expression varies by cultural norms. The paper emphasizes the need for culturally sensitive pedagogies in globalized higher education. It also notes that global mobility programs and international collaborations enrich students' entrepreneurial leadership capacities.

Brown & Lee (2017) Measuring outcomes of entrepreneurial leadership programs

Brown and Lee review assessment frameworks for evaluating entrepreneurial leadership training. Their analysis shows that traditional academic metrics fail to capture outcomes such as adaptability, opportunity recognition, and social impact. The paper proposes mixed-method evaluation combining reflective practice, peer assessment, and longitudinal tracking. They conclude that evidence-based measurement is critical for policy and funding support.

Miller & Davis (2016) The role of mentorship in shaping student entrepreneurial leaders

Miller and Davis argue that mentorship is central to entrepreneurial leadership development. Their study shows that students who engage with entrepreneurial role models exhibit stronger confidence, problem-solving, and resilience. Findings stress the importance of formal mentorship programs alongside informal networks. Barriers include limited availability of mentors and lack of diversity in role models.

Entrepreneurial Competencies

- **Creativity and innovation:** Developing new ideas and solutions.
- **Risk-taking and resilience:** Embracing calculated risk-taking and learning from failures.
- **Problem-solving and critical thinking:** Analyzing complex problems and developing effective solutions.
- **Communication and collaboration:** Working effectively with others to achieve common goals.
- **Adaptability and flexibility:** Adapting to changing circumstances and uncertainty.

Experiential Learning and Interdisciplinary Approaches

- **Hands-on experiences:** Engaging students in real-world projects and activities.
- **Interdisciplinary collaboration:** Encouraging students to work across disciplines to develop innovative solutions.
- **Real-world problem-solving:** Providing students with opportunities to address complex, real-world problems.
- **Mentorship and feedback:** Providing students with guidance and feedback from experienced entrepreneurs and industry experts.

Soft Skills and Entrepreneurial Leadership

- **Communication:** Developing effective communication skills to convey ideas and vision.
- **Teamwork:** Building effective teams and collaborating with others.
- **Adaptability:** Developing the ability to adapt to changing circumstances and uncertainty.
- **Leadership:** Developing leadership skills to inspire and motivate others.
- **Time management and organization:** Managing time and resources effectively to achieve goals.

Impact of Entrepreneurial Education

- **Enhance career prospects:** Providing students with the skills and mindset to succeed in a rapidly changing job market
- **Foster innovation capacity:** Encouraging students to develop innovative solutions to complex problems
- **Promote societal contribution:** Empowering students to make a positive impact on society through entrepreneurial ventures

International Journal of Innovative Research in Science, Engineering and Technology

Two Day National Level Conference on "Entrepreneurial Leadership: Guiding Teams Towards Visionary Goals"

26th & 27th September 2025

Department of Management Studies, Potti Sriramulu Chalavadi Mallikarjuna Rao College of Technology (Autonomous), Vijayawada, India

|Volume 14, Special Issue 6, December 2025|

- **Develop entrepreneurial mindset:** Encouraging students to think entrepreneurially and develop a mindset that is adaptable, innovative, and resilient

Challenges and Future Directions

- **Curricular rigidity:** Traditional curricula may not be conducive to entrepreneurial learning.
- **Insufficient emphasis on practical exposure:** Students may not have sufficient opportunities to engage in real-world projects and activities.
- **Limited resources:** Entrepreneurial education may require significant resources, including funding, mentorship, and infrastructure
- **Integrating entrepreneurial education into existing curricula:** Incorporating entrepreneurial education into existing courses and programs.
- **Providing practical exposure:** Providing students with opportunities to engage in real-world projects and activities.
- **Developing partnerships with industry:** Partnering with industry experts and entrepreneurs to provide mentorship, funding, and resources.

III. FRAMEWORK AND OVERVIEW

Framework Components

Fostering entrepreneurial leadership among students involves developing a comprehensive framework that incorporates essential competencies, pedagogical approaches, and ecosystem support. This framework aims to equip students with the skills, mindset, and resources necessary to succeed as entrepreneurs and leaders in their chosen fields.

1. Entrepreneurial Competencies

- **Creativity and Innovation:** Encourage students to think creatively and develop innovative solutions through project-based learning, design thinking, and service learning. This can involve providing students with real-world problems to solve, encouraging them to brainstorm and pitch their ideas, and supporting them in developing prototypes and testing their solutions.
- **Risk-Taking and Resilience:** Foster a mindset that embraces calculated risk-taking and learns from failures by creating a safe and supportive environment. This can involve teaching students about the importance of risk-taking in entrepreneurship, providing them with opportunities to experiment and learn from mistakes, and encouraging them to reflect on their experiences and develop resilience.
- **Problem-Solving and Critical Thinking:** Develop students' ability to analyze complex problems and develop effective solutions through real-world problem-solving activities and case studies. This can involve providing students with real-world scenarios, encouraging them to analyze the problems and develop solutions, and supporting them in testing and refining their solutions.
- **Communication and Collaboration:** Enhance students' skills in communicating ideas and working collaboratively through team-based projects and presentations. This can involve providing students with opportunities to work on group projects, encouraging them to communicate their ideas effectively, and teaching them how to collaborate with others to achieve a common goal.
- **Visionary Thinking and Leadership:** Inspire students to develop a vision and lead others towards achieving it through leadership development programs and mentorship. This can involve providing students with opportunities to develop their leadership skills, encouraging them to think visionary, and supporting them in developing a plan to achieve their goals.

2. Pedagogical Approaches

- **Experiential Learning:** Engage students in hands-on experiences like internships, startup incubators, and hackathons to develop practical skills. This can involve providing students with opportunities to work on real-world projects, encouraging them to experiment and learn from mistakes, and supporting them in developing practical skills and knowledge.
- **Interdisciplinary Learning:** Encourage students to draw on insights from multiple disciplines to solve complex problems. This can involve providing students with opportunities to work on interdisciplinary projects, encouraging them to think creatively and supporting them in developing a holistic understanding of complex problems.

International Journal of Innovative Research in Science, Engineering and Technology

Two Day National Level Conference on "Entrepreneurial Leadership: Guiding Teams Towards Visionary Goals"

26th & 27th September 2025

Department of Management Studies, Potti Sriramulu Chalavadi Mallikarjuna Rao College of Technology (Autonomous), Vijayawada, India

|Volume 14, Special Issue 6, December 2025|

- **Mentorship and Coaching:** Provide guidance and support from experienced entrepreneurs and industry experts. This can involve pairing students with mentors, providing them with coaching and feedback, and supporting them in developing their skills and knowledge.
- **Real-World Problem-Solving:** Encourage students to work on real-world problems and develop practical solutions. This can involve providing students with real-world scenarios, encouraging them to analyze the problems and develop solutions, and supporting them in testing and refining their solutions.
- **Feedback and Reflection:** Foster a culture of continuous feedback and reflection to promote student growth and development. This can involve providing students with regular feedback, encouraging them to reflect on their experiences, and supporting them in developing a growth mindset.

3. Ecosystem Support

- **University-Industry Partnerships:** Collaborate with industry partners to provide practical experiences, resources, and networking opportunities. This can involve partnering with companies to provide internships, supporting student projects, and providing access to industry experts and resources.
- **Entrepreneurial Community:** Create a supportive community of entrepreneurs, mentors, and peers that can provide guidance, resources, and networking opportunities. This can involve creating a community of entrepreneurs, providing access to mentors and peers, and supporting students in developing their networks.
- **Access to Funding and Resources:** Provide students with access to funding, incubators, and other resources that can support their entrepreneurial ventures. This can involve providing students with access to funding opportunities, supporting them in developing business plans, and providing them with resources and support to launch their ventures.
- **Policy and Regulatory Support:** Ensure policies and regulations support entrepreneurial activity and innovation. This can involve reviewing policies and regulations, identifying areas for improvement, and working with stakeholders to create a supportive environment for entrepreneurship.

The objectives of this framework are

- To Develop Entrepreneurial Mindset
- To Enhance Entrepreneurial Skills
- To Provide Practical Experience
- To Create a Supportive Ecosystem

Implementation Strategies

Integrate Entrepreneurial Competencies into Curriculum: Incorporate entrepreneurial competencies into existing courses and programs. This can involve reviewing existing courses, identifying areas for integration, and developing new courses and programs that focus on entrepreneurial competencies.

Develop Experiential Learning Opportunities: Create hands-on experiences that provide students with practical skills and real-world experience. This can involve developing internships, startup incubators, and other experiential learning opportunities that provide students with practical skills and knowledge.

Establish Mentorship Programs: Pair students with experienced entrepreneurs and industry experts who can provide guidance and support. This can involve developing mentorship programs, pairing students with mentors, and providing support and resources for students to learn from their mentors.

Foster a Culture of Entrepreneurship: Encourage a culture of entrepreneurship and innovation within the institution by providing resources, support, and recognition for entrepreneurial activities. This can involve creating a supportive environment, providing access to funding and resources, and celebrating student achievements.

Monitor and Evaluate Progress: Regularly assess the effectiveness of the framework and make adjustments as needed to ensure it remains relevant and effective in fostering entrepreneurial leadership among students. This can involve collecting data, conducting evaluations, and making changes to the framework based on the results.

IV. FINDINGS

1. **Experiential learning is effective:** Structured, real-world engagement between students and professional communities develops entrepreneurial agency, social capital, and emotional alignment to a professional identity.
2. **Psychological traits are crucial:** Soft skills like resilience, grit, creativity, and risk-taking are essential for entrepreneurial success.

International Journal of Innovative Research in Science, Engineering and Technology

Two Day National Level Conference on “Entrepreneurial Leadership: Guiding Teams Towards Visionary Goals”

26th & 27th September 2025

Department of Management Studies, Potti Sriramulu Chalavadi Mallikarjuna Rao College of Technology (Autonomous), Vijayawada, India

|Volume 14, Special Issue 6, December 2025|

- 3. AI and adaptive tech enhance learning:** AI-scaffolded systems can improve business planning skills while retaining human mentorship value.
- 4. Institutional support is vital:** University support influences entrepreneurial attitudes and perceived behavioural control.
- 5. Entrepreneurship education is beneficial:** Nurtures hands-on skills, soft skills, innovative mindset, resilience, and risk-taking.
- 6. Industry 4.0 requires tech-driven learning:** Integration of technologies, sustainability, cross-disciplinary collaboration, digital transformation, and industry partnerships improve student innovation and collaboration skills.

V. RECOMMENDATIONS

- 1. Integrate experiential learning:** Incorporate real-world projects, internships, and industry partnerships into entrepreneurship education.
- 2. Develop soft skills:** Focus on building resilience, grit, creativity, and risk-taking in students.
- 3. Leverage AI and adaptive tech:** Utilize AI-scaffolded systems to enhance business planning skills and provide personalized support.
- 4. Foster institutional support:** Encourage universities to provide resources, mentorship, and support for entrepreneurial students.
- 5. Promote interdisciplinary collaboration:** Encourage collaboration between students from different disciplines to develop innovative solutions.
- 6. Emphasize sustainability and digital transformation:** Incorporate sustainability and digital transformation into entrepreneurship education to prepare students for Industry 4.0.

VI. CONCLUSION

Fostering entrepreneurial leadership among students is crucial for equipping them with the necessary skills, mindset, and competencies to succeed in a rapidly changing world. Entrepreneurial education can have a positive impact on students' career prospects, innovation capacity, and societal contribution. By integrating experiential learning, interdisciplinary approaches, and real-world problem-solving into academic curricula, educational institutions can provide students with the opportunities and resources needed to develop entrepreneurial competencies. Addressing the challenges and limitations of entrepreneurial education requires a reimaged educational framework that prioritizes innovation, creativity, and real-world application. Ultimately, fostering entrepreneurial leadership among students can empower them to make a positive impact on society and achieve their full potential.

REFERENCES

1. Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25(1), 217-226.
2. Drucker, P. F. (1985). *Innovation and entrepreneurship*. Harper & Row.
3. Sarasvathy, S. D. (2001). Causation and effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency. *Academy of Management Review*, 26(2), 243-263.
4. Bird, B. (1995). Towards a theory of entrepreneurial action: Combining effectuation and intentional perspectives. *Entrepreneurship Theory and Practice*, 39(3), 573-595.
5. Fayolle, A., & Gailly, B. (2015). The impact of entrepreneurship education on entrepreneurial attitudes and intention: A meta-analytical study. *Small Business Economics*, 44(2), 351-375.
6. Martin, B. C., McNally, J. J., & Kay, M. J. (2013). Examining the formation of human capital in entrepreneurship: A meta-analysis of entrepreneurship education outcomes. *Journal of Business Venturing*, 28(2), 211-224.
7. Pittaway, L., & Cope, J. (2007). Entrepreneurship education: A systematic review of the evidence. *International Small Business Journal*, 25(5), 479-510.
8. Bacigalupo, M., Kampylis, P., Punie, Y., & Van den Brande, G. (2016). *EntreComp: The Entrepreneurship Competence Framework*. Publications Office of the European Union.
9. Neck, H. M., & Greene, P. G. (2011). Entrepreneurship Education: Known Worlds and New Frontiers. *Journal of Small Business Management*, 49(1), 55-70.
10. Kolb, A. Y., & Kolb, D. A. (2005). Learning Styles and Learning Spaces: Enhancing Experiential Learning in Higher Education. *Academy of Management Learning & Education*, 4(2), 193-212.

International Journal of Innovative Research in Science, Engineering and Technology

Two Day National Level Conference on “Entrepreneurial Leadership: Guiding Teams Towards Visionary Goals”

26th & 27th September 2025

Department of Management Studies, Potti Sriramulu Chalavadi Mallikarjuna Rao College of Technology (Autonomous), Vijayawada, India

|Volume 14, Special Issue 6, December 2025|

11. Isenberg, D. J. (2010). How to Start an Entrepreneurial Revolution. *Harvard Business Review*, 88(6), 40-50.
12. World Economic Forum. (2020). The Future of Jobs Report 2020. World Economic Forum.
13. Surie, G., & Ashley, A. (2008). Integrating Leadership Development and Entrepreneurship Education. *Journal of Leadership Education*, 7(1), 108-125.
14. Gibb, A. (2002). In pursuit of a new 'enterprise' and 'entrepreneurship' paradigm for learning: Creative destruction, new values, new ways of doing things and new combinations of knowledge. *International Journal of Management Reviews*, 4(3), 233-269.



INTERNATIONAL
STANDARD
SERIAL
NUMBER
INDIA



INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN SCIENCE | ENGINEERING | TECHNOLOGY

 9940 572 462  6381 907 438  ijirset@gmail.com

www.ijirset.com



Scan to save the contact details