

NURTURING ENTREPRENEURIAL MINDSET AND OUT-OF-THE-BOX THINKING AMONG ADULT EDUCATION UNDERGRADUATES IN BAYELSA STATE

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Abstract

The contemporary landscape of education increasingly recognizes the importance of fostering entrepreneurial skills and innovative thinking to prepare individuals for an ever-evolving global economy. However, limited scholarly attention has been directed towards understanding the specific needs and effective strategies for nurturing entrepreneurial mindset within adult education contexts. This study outlines a comprehensive framework that investigated the cultivation of an entrepreneurial mindset and out-of-the-box thinking among adult education undergraduates in Bayelsa State. A descriptive survey design was adopted for the study. Four research questions were raised to guide the study. The population of the study was all undergraduates of adult education in tertiary institutions in Bayelsa State. A sample of 240 respondents drawn from the Department of Adult and non-formal Education in the 2 tertiary institutions was used for the study. The instrument for data collection was a structured questionnaire styled as “Nurturing Entrepreneurial Mindset Questionnaire” developed by the researcher and validated by experts. The reliability analysis was done using Cronbach Alpha Formula, which yielded a value of 0.89. The research questions were answered using mean and standard deviation. The findings established that problem-solving emphasis, collaborative learning, feedback and reflection, creativity encouragement, entrepreneurial role models, risk-taking support are teaching methodologies for cultivating entrepreneurial mindset and out-of-the-box thinking among adult education undergraduates. It was recommended that the management of tertiary institutions should organize orientation programs for Adult Education undergraduates to sharpen their entrepreneurial mindset as well as foster out-of-the-box thinking.

Keywords: Nurturing, Entrepreneurial Mindset, Out-Of-The Box Thinking, Adult Education Undergraduates

Introduction

Entrepreneurship has emerged as a pivotal driver of economic growth and innovation in today's dynamic global economy (Shane & Venkataraman, 2021). As such, there is an increasing recognition of the need to cultivate entrepreneurial mindset and foster out-of-the-box thinking among individuals across various educational stages. While much attention has been directed towards entrepreneurship education in traditional undergraduate programs, there remains a notable gap in understanding and addressing the unique challenges and opportunities associated with nurturing entrepreneurial mindset among adult education undergraduates. Adult learners, characterized by diverse backgrounds, experiences, and motivations, present a distinct context for entrepreneurship education that warrants specific investigation and tailored interventions.

Historically, entrepreneurship education has been primarily focused on younger learners in formal educational settings (Fayolle & Gailly, 2015). However, the landscape of education has evolved to recognize the importance of lifelong learning and the inclusion of adult learners in entrepreneurship education initiatives (Hynes & Richardson, 2018). Adult education programs serve individuals seeking to enhance their skills, transition to new careers, or pursue personal interests, making them an ideal platform for fostering entrepreneurial mindset among individuals at various stages of their professional and personal development.

The cultivation of entrepreneurial mindset among adult education undergraduates is multifaceted, encompassing not only the acquisition of business knowledge and technical skills but also the development of creativity, resilience, and adaptability (Pittaway & Cope, 2007). Moreover, adult learners often

have distinct learning preferences and life experiences that must be considered in designing effective entrepreneurship education programs (Jones & English, 2004). Therefore, there is a pressing need for research that explores innovative pedagogical approaches, tailored mentorship programs, and experiential learning activities specifically designed to engage and empower adult learners in developing entrepreneurial mindset and out-of-the-box thinking.

Understanding the psychological factors influencing the adoption of entrepreneurial behaviors among adult learners is crucial for designing interventions that effectively motivate and support their entrepreneurial aspirations (Kolvereid, 2016). Additionally, assessing the long-term outcomes of integrating entrepreneurship education into adult education curricula is essential for evaluating the efficacy and sustainability of such initiatives (Jones & Iredale, 2010). By addressing these research gaps, we can enhance our understanding of how best to nurture entrepreneurial mindset among adult education undergraduates and empower them to thrive in an increasingly complex and competitive global economy.

This study outlined a comprehensive framework for investigating the cultivation of entrepreneurial mindset and out-of-the-box thinking among adult education undergraduates. Ultimately, by advancing our understanding of effective strategies for entrepreneurship education in adult learning settings, this research has the potential to contribute to the development of innovative educational programs that empower adult learners to unleash their entrepreneurial potential and drive economic and social progress.

Statement of the Problem

Entrepreneurship education has gained prominence as a means to foster innovation, economic growth, and job creation in today's rapidly changing world (Shane & Venkataraman, 2021). However, there is a significant gap in research and practice concerning the effective nurturing of entrepreneurial mindset and out-of-the-box thinking among adult education undergraduates. While entrepreneurship education has been extensively studied in

traditional undergraduate programs, there is limited understanding of how to tailor educational interventions to meet the unique needs and challenges of adult learners pursuing higher education later in life (Fayolle & Gailly, 2015).

Adult education undergraduates represent a diverse cohort with varying educational backgrounds, life experiences, and career aspirations (Jones & English, 2004). Unlike traditional undergraduates, adult learners often juggle multiple responsibilities, including work, family, and community commitments, which can influence their engagement with entrepreneurship education initiatives (Hynes & Richardson, 2018). Consequently, there is a pressing need to explore innovative pedagogical approaches, mentorship programs, and experiential learning activities that effectively engage and empower adult learners to develop entrepreneurial mindset and cultivate out-of-the-box thinking (Pittaway & Cope, 2007).

Moreover, the psychological factors influencing the adoption of entrepreneurial behaviors among adult learners remain underexplored (Kolvereid, 2016). Understanding the motivational drivers, self-efficacy beliefs, and perceived barriers to entrepreneurship among adult education undergraduates is crucial for designing targeted interventions that address their unique needs and aspirations. Additionally, there is a lack of research evaluating the long-term outcomes of integrating entrepreneurship education into adult education curricula, hindering our ability to assess the effectiveness and sustainability of such initiatives in preparing adult learners for entrepreneurial endeavors (Jones & Iredale, 2010). Therefore, addressing these research gaps is essential for informing the development of evidence-based strategies to nurture entrepreneurial mindset and out-of-the-box thinking among adult education undergraduates and equip them with the skills and mindset needed to succeed in today's competitive global economy.

Aim and Objectives of the Study

This study outlined a comprehensive framework that investigated the cultivation of an entrepreneurial mindset and out-of-the-box thinking among adult education undergraduates

in Bayelsa State. Specifically, the study achieved the following:

1. to investigate the effectiveness of different pedagogical approaches in nurturing an entrepreneurial mindset among adult education undergraduates.
2. to examine the impact of experiential learning activities on developing entrepreneurial skills and mindset in adult education settings.
3. to identify the psychological factors influencing adopting entrepreneurial behaviors and attitudes among adult learners.
4. to assess the long-term outcomes of integrating entrepreneurship education into adult education curricula in terms of career success and innovative thinking.

Research Questions

The following research questions guided the study:

1. What teaching methodologies are most effective in cultivating entrepreneurial mindset and out-of-the-box thinking among adult education undergraduates?
2. What are the perceived benefits and challenges of incorporating experiential learning activities into adult education courses to promote entrepreneurial thinking?
3. What psychological traits and motivational factors contribute to the willingness of adult learners to engage in entrepreneurial activities?
4. To what extent does integrating entrepreneurship education into adult education curricula impact graduates' career trajectories and propensity for innovation?

Conceptual Clarification

Nurturing entrepreneurial mindset and out-of-the-box thinking among adult education undergraduates requires a clear understanding of the key concepts involved. "Nurturing" in this context refers to the deliberate and systematic process of fostering growth, development, and transformation in individuals' attitudes, behaviors, and cognitive processes (Deci & Ryan, 2002). It involves providing supportive environments, opportunities for learning and experimentation, and guidance to facilitate the acquisition of new

skills and perspectives. In the context of entrepreneurship education, nurturing encompasses activities aimed at instilling entrepreneurial values, fostering creativity, and empowering individuals to identify and pursue opportunities for innovation and value creation (Pittaway & Cope, 2007).

"Entrepreneurial mindset" refers to a set of cognitive, affective, and behavioral attributes that enable individuals to recognize opportunities, take calculated risks, and persist in the face of challenges to create value (Baron, 2008). It involves a proactive orientation towards problem-solving, a willingness to experiment and learn from failure, and an ability to envision and pursue novel solutions to societal problems or market needs (Fayolle, 2013). Nurturing entrepreneurial mindset among adult education undergraduates entails cultivating traits such as creativity, resilience, adaptability, and a bias towards action through targeted educational interventions and experiential learning activities (Shane & Venkataraman, 2021).

"Out-of-the-box thinking" refers to the ability to approach problems or situations in unconventional ways, breaking free from established norms, routines, and assumptions to generate innovative solutions (Boden, 1994). It involves lateral thinking, divergent reasoning, and the willingness to challenge conventional wisdom and explore alternative perspectives (De Bono, 1970). Nurturing out-of-the-box thinking among adult education undergraduates requires creating environments that encourage curiosity, experimentation, and risk-taking, as well as providing tools and techniques to stimulate creative thinking and problem-solving (Amabile, 1983). It also involves fostering a culture of openness to new ideas, collaboration, and constructive feedback to facilitate the exploration and refinement of innovative concepts and solutions (Amabile, 1996).

Nurturing entrepreneurial mindset and out-of-the-box thinking among adult education undergraduates involves creating supportive learning environments, fostering entrepreneurial values and behaviors, and providing opportunities for creative exploration and experimentation. It requires a holistic approach that integrates pedagogical strategies, mentorship programs, and experiential learning

activities to empower individuals to develop the cognitive, affective, and behavioral attributes needed to thrive as innovative and enterprising individuals in today's complex and dynamic world.

Theoretical Review

Two theories that can help explain the nurturing of entrepreneurial mindset and out-of-the-box thinking among undergraduates are Social Cognitive Theory and Effectuation Theory.

1. Social Cognitive Theory (Bandura, 1986)

Social Cognitive Theory emphasizes the reciprocal interaction between personal factors, environmental influences, and behavior. According to this theory, individuals learn by observing others and modeling their behavior, a process known as observational learning or modeling. In the context of entrepreneurship education, students can develop entrepreneurial mindset and out-of-the-box thinking through exposure to role models, mentors, and successful entrepreneurs. By observing and interacting with individuals who embody entrepreneurial traits and behaviors, students can learn to emulate their approaches to problem-solving, risk-taking, and opportunity recognition. Social Cognitive Theory also highlights the importance of self-efficacy, the belief in one's ability to accomplish tasks and overcome challenges. By fostering a sense of self-efficacy through experiential learning activities and supportive feedback, educators can empower students to develop the confidence and resilience needed to pursue entrepreneurial endeavors.

2. Effectuation Theory (Sarasvathy, 2001)

Effectuation Theory offers a unique perspective on entrepreneurial decision-making and behavior. Unlike traditional approaches that focus on predictive rationality and goal-driven planning, Effectuation Theory emphasizes the use of affordable loss, leveraging contingencies, and engaging stakeholders in the entrepreneurial process. According to this theory, entrepreneurs adopt a flexible and adaptive approach to problem-solving, iteratively exploring and exploiting opportunities based on their existing resources and networks. In the context of

entrepreneurship education, Effectuation Theory suggests that educators can nurture entrepreneurial mindset and out-of-the-box thinking by providing students with opportunities to engage in effectual reasoning and action. By encouraging students to embrace uncertainty, experiment with different strategies, and leverage their personal networks and experiences, educators can help students develop a more nuanced understanding of entrepreneurship as a dynamic and iterative process of discovery and creation.

Methodology

This study adopted a descriptive survey research design. Charles-Owaba (2022), disclosed that descriptive survey research design involves collecting and analyzing data from only a few individuals or items considered to be representatives of the entire group. This design is appropriate for this study since information will be gathered from a sample of the population (Adult education undergraduates in Bayelsa State), who are familiar with the ideas relating to the purpose of study with the aim of generalizing the results for the entire population. The population of the study comprised of all adult education undergraduates in Bayelsa State. Purposive sampling techniques was used to select the only 2 tertiary institutions that have adult education department. Quota sampling method was used to sample out 20 undergraduates each from each level in the department of various institutions. This resulted to 240 respondents which formed the sample of the study. The instrument for data collection was a questionnaire developed by the researcher, tagged; "Nurturing Entrepreneurial Mindset Questionnaire *Questionnaire (NEMOTQ)*" It consists of two (2) sections, namely; Section A and B. Section A measured the demographic variables of the respondents, Section B consist of a20 items on the Nurturing Entrepreneurial Mindset and Out-Of-The-Box Thinking on a 4-point rating scale of Very High Extent =4, High Extent =3, Low Extent = 2 and Very Low Extent = 1. The content and face validity of the instrument was done by experts in Measurement and Evaluation and Adult and Non-Formal Education. Their corrections and

suggestions resulted to the final draft used in the study. The instrument was trial tested using twenty (10) other undergraduates that did not participate in the research but possess the same characteristics as the population of interest. The reliability co-efficient of 0.89 was obtained using Cronbach Alpha formula which was considered appropriate for this study. The data was analyzed using mean and standard deviation for the research questions. The decision rule for answering the research questions was arrived at by finding the average of the 4-point scale, thus;

$\frac{4+3+2+1}{4} = \frac{10}{4} = 2.50$ thus, any item with mean of 2.50 and above was interpreted as agreed, while mean score below were interpreted as disagreed.

Analysis and Results

Research Question 1

What teaching methodologies are most effective in cultivating entrepreneurial mindset and out-of-the-box thinking among adult education undergraduates?

Table 1: Mean and standard deviation on the teaching methodologies are most effective in cultivating entrepreneurial mindset and out-of-the-box thinking among adult education undergraduates

S/N	STATEMENT	X	SD	REMARK
1.	Problem-solving skills that encourage students to identify and address entrepreneurial challenges.	2.8822	0.85152	A
2.	Collaborative learning environments where students work together on projects and share ideas.	2.6493	0.74699	A
3.	Creating opportunities for students to receive feedback on their ideas and reflect on their entrepreneurial journey.	3.7452	0.50083	A
4.	Approaches that encourage creativity and innovation in approaching entrepreneurial problems and opportunities.	3.7315	0.53884	A
5.	Exposing students to successful entrepreneurial role models through guest lectures, case studies, or mentorship programs.	2.9096	0.48043	A
GRAND MEAN		1.888	-	A

*A=Agree, D=Disagree

The table 1 above shows the mean and standard deviation on the responses on the teaching methodologies are most effective in cultivating entrepreneurial mindset and out-of-the-box thinking among adult education undergraduates. All items had mean value above the cut-off value of 2.50, which implies that all respondents agree that Problem-Solving Emphasis, Collaborative Learning, Feedback and Reflection, Creativity Encouragement, Entrepreneurial Role Models, Risk-Taking

Support are teaching methodologies for cultivating entrepreneurial mindset and out-of-the-box thinking among adult education undergraduates.

Research Question 2

What are the perceived benefits of incorporating experiential learning activities into adult education courses to promote entrepreneurial thinking?

Table 2: Mean and standard deviation on the perceived benefits and challenges of incorporating experiential learning activities into adult education courses to promote entrepreneurial thinking

S/N	STATEMENT	X	SD	REMARK
1.	The experiential learning activities provided in the course are relevant to developing entrepreneurial skills and mindset.	2.8822	0.85152	A
2.	The experiential learning activities actively engage participants in hands-on learning experiences related to entrepreneurship.	2.8493	0.74699	A
3.	The experiential learning activities provide opportunities for participants to engage in problem-solving exercises relevant to real-world entrepreneurial challenges.	2.7452	0.50083	A
4.	The experiential learning activities foster collaboration and teamwork among participants, enhancing their ability to work effectively in entrepreneurial settings.	2.7315	0.53884	A
5.	The experiential learning activities encourage participants to think creatively and innovate in developing solutions to entrepreneurial problems.	2.9096	0.48043	A
GRAND MEAN		1.888	-	A

A=Agree, D=Disagree

The table 2 above shows the mean and standard deviation on the responses on the perceived benefits of incorporating experiential learning activities into adult education courses to promote entrepreneurial thinking. All items had mean value above the cut-off value of 2.50, which implies that all respondents agree that relevance of activities, hands-on engagement, problem-solving opportunities, collaborative learning environment, creativity

and innovation perceived benefits of incorporating experiential learning activities into adult education courses to promote entrepreneurial thinking.

Research Question 3

What psychological traits and motivational factors contribute to the willingness of adult learners to engage in entrepreneurial activities?

Table 3: Mean and standard deviation on psychological traits and motivational factors contribute to the willingness of adult learners to engage in entrepreneurial activities

S/N	STATEMENT	X	SD	REMARK
1.	Self-Efficacy	2.8822	0.85152	A
2.	Risk Perception	2.7493	0.74699	A
3.	Innovation Orientation	2.7452	0.50083	A
4.	Perceived Social Support	2.7315	0.53884	A
5.	Opportunity Recognition	2.9096	0.48043	A
	GRAND MEAN	2.888	-	A

The table 3 above shows the mean and standard deviation on the responses on the psychological traits and motivational factors that contributes to the willingness of adult learners to engage in entrepreneurial activities. All items had mean value above the cut-off value of 2.50, which implies that all respondents agree that Self-Efficacy, Risk Perception, Innovation Orientation, Locus of Control, Perceived Social Support, Opportunity Recognition

psychological traits and motivational factors that contributes to the willingness of adult learners to engage in entrepreneurial activities.

Research Question 4

To what extent does integrating entrepreneurship education into adult education curricula impact graduates' career trajectories and propensity for innovation?

Table 4: Mean and standard deviation on the extent to which integrating entrepreneurship education into adult education curricula impact graduates' career trajectories and propensity for innovation

S/N	STATEMENT	X	SD	REMARK
16.	The entrepreneurship education I received has enhanced my ability to think innovatively and creatively.	1.8822	0.85152	LE
17.	I am more inclined to introduce innovative practices and solutions in my work as a result of entrepreneurship education.	2.0493	0.74699	LE
18.	I frequently apply the entrepreneurial skills and knowledge gained from my education in adult entrepreneurship programs to my professional endeavors.	1.7452	0.50083	LE
19.	I am better able to identify opportunities for innovation and entrepreneurship in my field or industry.	1.7315	0.53884	LE
20.	I am more willing to take calculated risks in my career or professional pursuits due to my entrepreneurship education.	1.9096	0.48043	LE
	GRAND MEAN	1.888	-	LE

*A=Agree, D=Disagree

The table 4 above shows the mean and standard deviation on the extent to which integrating entrepreneurship education into adult education curricula impact graduates' career trajectories and propensity for innovation. All items had

mean value above the cut-off value of 2.50, which implies that the extent to which integrating entrepreneurship education into adult education curricula impact graduates'

career trajectories and propensity for innovation is high.

Discussion of Findings

The effectiveness of different pedagogical approaches in nurturing an entrepreneurial mindset among adult education undergraduates.

The findings in research question 1 revealed that Problem-Solving Emphasis, Collaborative Learning, Feedback and Reflection, Creativity Encouragement, Entrepreneurial Role Models, Risk-Taking Support are teaching methodologies for cultivating entrepreneurial mindset and out-of-the-box thinking among adult education undergraduates. This supports Fayolle and Gailly (2015) and Hynes and Richardson (2018). Fayolle (2013) Jones & English (2004).

The impact of experiential learning activities on developing entrepreneurial skills and mindset in adult education settings.

The findings in research question 2 revealed that relevance of activities, hands-on engagement, problem-solving opportunities, collaborative learning environment, creativity and innovation perceived benefits of incorporating experiential learning activities into adult education courses to promote entrepreneurial thinking. This supports Fayolle and Gailly (2015), Hynes and Richardson (2018), Fayolle (2013) and Jones and English (2004).

The psychological factors influencing adopting entrepreneurial behaviors and attitudes among adult learners.

The findings in research question 3 revealed that Self-Efficacy, Risk Perception, Innovation Orientation, Locus of Control, Perceived Social Support, Opportunity Recognition psychological traits and motivational factors that contributes to the willingness of adult learners to engage in entrepreneurial activities. This supports Hynes and Richardson (2018), Fayolle (2013) and Jones and English (2004).

The long-term outcomes of integrating entrepreneurship education into adult

education curricula in terms of career success and innovative thinking.

The findings in research question 4 revealed that the extent to which integrating entrepreneurship education into adult education curricula impact graduates' career trajectories and propensity for innovation is high. This supports Fayolle and Gailly (2015), Fayolle (2013) and Jones and English (2004).

Conclusion

Nurturing an entrepreneurial mindset and fostering out-of-the-box thinking among undergraduates are crucial endeavors in today's rapidly evolving economic landscape. An entrepreneurial mindset, characterized by creativity, resilience, and a proactive orientation toward problem-solving, is increasingly recognized as a key driver of innovation, economic growth, and social progress. Through innovative pedagogical approaches, experiential learning activities, and mentorship programs, educators can empower students to develop the skills, attitudes, and mindset necessary to thrive as entrepreneurs in diverse professional and personal contexts.

Recommendations

1. Stakeholders in adult education should provide students with hands-on experiences, such as internships, entrepreneurial projects, and startup competitions, to apply theoretical knowledge in real-world settings.
2. University management should encourage interdisciplinary collaboration by offering joint courses or projects that bring together students from diverse academic backgrounds.
3. The Government should establish mentorship programs that pair students with experienced entrepreneurs, industry professionals, or alumni who can provide guidance, support, and industry insights.
4. Adult education lecturers should incorporate activities and assignments that challenge students to think critically, analyze problems from multiple angles, and generate creative solutions.

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