



## Integration of Career Planning in Entrepreneurship Education: Basis for a Career Development Program

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### Abstract

This study examined the integration of career planning into entrepreneurship education as a foundation for a career development program at Shandong Vocational College of Animal Husbandry and Veterinary Medicine. Employing a convergent parallel mixed-methods design, data were collected from 8 teachers and 390 students through surveys, interviews, and focus groups. Quantitative findings revealed that integration enhanced entrepreneurial interest (WM = 4.33) and outcome expectations (WM = 4.30), though self-efficacy remained comparatively lower (WM = 4.11). Qualitative results highlighted barriers such as over-reliance on theoretical instruction, limited mentorship opportunities, and unrealistic success expectations. These challenges underscored the need for experiential, practice-oriented approaches. The study proposed the “Pathways to Purpose” program, which emphasizes project-based learning, industry mentorship, and digital tool utilization to strengthen entrepreneurial confidence and align educational outcomes with labor market demands. The integration of career planning demonstrated significant potential to foster entrepreneurial readiness by enhancing motivation, clarifying career trajectories, and cultivating resilience. Findings suggest that embedding career planning within entrepreneurship curricula can bridge the gap between academic instruction and real-world application, thereby equipping students with the psychological, social, and technical resources necessary for sustainable career development. The proposed program offers a replicable framework for vocational institutions seeking to balance theoretical knowledge with practical competencies in entrepreneurship education.

**Keywords:** career planning, entrepreneurship education, self-efficacy, outcome expectations, entrepreneurial interest, vocational education, social cognitive career theory



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## INTRODUCTION

While the global recognition of career planning in entrepreneurship education is growing, significant gaps persist in aligning curricula with real-world industry demands (Huang et al., 2021). Nationally, China's efforts to integrate production with education still face challenges in labor market alignment, limiting their impact on student trajectories (Rong & Ma, 2024). Locally, in Shandong Province, despite the success of employment competition courses, there remains a notable deficiency in leveraging digital tools and industry collaborations for personalized support. Addressing these shortcomings, this study explored the integration of personalized career planning strategies across global, national, and local

contexts to enhance entrepreneurial preparedness. By examining these impacts, the research developed an adaptable, evidence-based framework designed to align educational outcomes with market expectations and improve the overall responsiveness of entrepreneurship education.

**Theoretical Framework.** Social Cognitive Career Theory (SCCT) posits that career development is driven by the interplay between self-efficacy—the belief in one's ability to succeed—and outcome expectations, which dictate the perceived rewards of a specific path. These internal drivers are refined by learning experiences and personal interests, where positive reinforcement builds the confidence necessary to pursue and persist in professional

goals. This framework is especially valuable in educational and entrepreneurial contexts, as it allows researchers to examine how students' mindsets are shaped by both their personal motivations and their external environments. The theory helps educators craft targeted programs that bolster students' self-belief and provide the resources needed to navigate a dynamic job market successfully.

**Conceptual Framework.** Figure 1 outlined the conceptual framework of the study, which is grounded in SCCT. It illustrates how the reciprocal relationship between teachers and students drives career development through the psychological mediators of self-efficacy, outcome expectations, and interest. By providing guidance and mastery experiences, teachers bolster a student's belief in their own capabilities and clarify the potential rewards of specific paths, while active student engagement transforms these external inputs into personal career aspirations. As these three core constructs—confidence, anticipated results, and curiosity—are strengthened through collaborative learning environments, they directly result in enhanced career readiness, more informed decision-making, and proactive engagement in future planning.

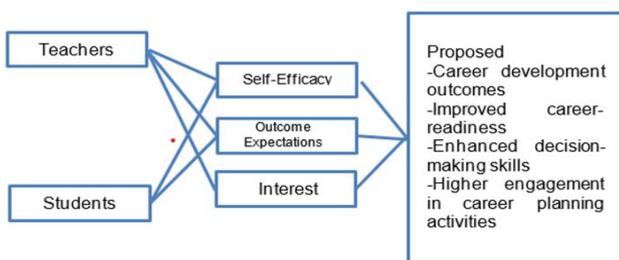


Figure 1  
*Conceptual Framework*

## LITERATURE REVIEW

**Social Cognitive Career Theory.** Drawing on SCCT, entrepreneurial intentions develop through the interplay of self-efficacy, outcome expectations, and personal goals, where a strong belief in one's business capabilities significantly drives engagement in business activities (AdeBusuyi, et al., 2022). These intentions are bolstered when students

anticipate rewards like financial success or social recognition and align their objectives with business education (Pham et al., 2024), providing the motivational resources necessary for professional prosperity. To foster these cognitive mediators, curricula must integrate experiential learning—such as internships, workshops, and mentorship—to bridge the gap between theory and practice, thereby enhancing perceived self-efficacy and resilience (Nwosu et al., 2022). Furthermore, addressing societal and institutional contexts ensures that entrepreneurial intentions remain responsive to socioeconomic realities (Chukwuedo & Ementa, 2022). By incorporating self-reflection and goal-setting tools, institutions can improve motivation, solidify professional identity, and promote long-term career success (Boutaky & Sahiba Edine, 2023; Oben & Van Rooyen, 2023).

**Career Development Program.** In alignment with SCCT, self-efficacy is a vital determinant of entrepreneurial persistence, reinforced through experiential mastery like internships and project-based learning (Nwosu et al., 2022). These practical engagements translate theory into the confidence needed for business initiation, while feedback and peer modeling facilitate skill refinement and a resilient professional identity (Maheshwari, et al., 2023). Beyond individual cognition, effective integration requires institutional support; environments prioritizing mentorship and resource access significantly elevate students' outcome expectations and perceived abilities. This multidimensional approach is especially critical for bridging socioeconomic barriers for underrepresented groups (Mei & Symaco, 2022). Ultimately, a curriculum marrying practical narratives with robust environmental support creates a fertile ecosystem, providing the psychological tools and networking resources necessary for long-term success (Oben & Van Rooyen, 2023).

**Entrepreneurship Education.** To promote a qualified generation of entrepreneurs, educational curricula must systematically integrate self-efficacy and outcome expectations through experiential learning,

guidance, and constructive feedback. Self-efficacy significantly reinforced business intentions and competencies when students engaged in real-world simulations and project-based learning (Liao et al., 2022), while outcome expectations—the cognitive evaluation of rewards like autonomy and social impact—motivated students when favorable results were anticipated (Osorio Tinoco, et al., 2022; Maheshwari et al., 2023; Boutaky & Sahib Eddine, 2023). Simultaneously, contextual factors like socioeconomic status and institutional resources acted as critical catalysts within the SCCT framework, where environments rich in networking and mentorship bridged the theory-practice gap (Chukwuedo & Ement, 2022). Because disadvantaged students faced structural barriers, cohesive curricula must foster supportive ecosystems to mitigate impediments and provide necessary scaffolding (Haneberg, et al, 2022).

**Career Planning.** Global career planning within entrepreneurship education bridged academic instruction and market demands through structured guidance, self-assessment, and experiential methods like internships and incubators, enhancing professional identity and 21st-century social skills (Deveci, 2022; Do Nguyen & Nguyen, 2023). These frameworks fostered business resilience and a proactive mindset across diverse economies, enabling students to navigate infrastructure challenges and socioeconomic limitations (Motta & Galina, 2023). In China, transitioning from theoretical models to industry-academia collaborations was essential for dismantling limiting beliefs and amplifying intentions (Mei & Symaco, 2022; Gao & Qin, 2022; Wang et al., 2023). Beyond technical training, intersecting psychological resilience with digital proficiency and AI-driven tools provided the personalized guidance required to thrive in a complex post-pandemic economy (Jin, 2022; Huang et al., 2022; Nave and Ferreira, 2022; Hou et al., 2023).

**Integration of Career Planning in Entrepreneurship Education.** Research by Wang et al. (2023) highlighted that initiating career

planning at the secondary level created a critical opportunity window to instill an entrepreneurial mindset, enhancing self-awareness and decision-making through tailored programs (Wang et al., 2023). The post-COVID-19 landscape accelerated the need for curricula marrying career planning with digital readiness. Synthesized findings emphasized that prioritizing complete career development programs was a primary determinant of successful entrepreneurial results (Wang, 2022). Ultimately, Maheshwari et al. (2023) and Liao et al. (2022) reflected an urgent need for multifaceted training that developed self-efficacy and outcome expectations while addressing contextual factors to facilitate theory-to-practice transitions.

**Statement of the Problem.** This study investigates the integration of career planning in entrepreneurship education as a basis for developing a career development program. It sought to answer the following questions:

1. How does the integration of career planning into entrepreneurship education influence students' entrepreneurial skills in terms of:
  - 1.1 self-efficacy;
  - 1.2 outcome expectations; and,
  - 1.3 interest?
2. What challenges do students face when integrating career planning into entrepreneurship education?
3. What strategies can be employed to overcome the challenges of integrating career planning into entrepreneurship education?
4. What career development programs can be implemented within entrepreneurship education to effectively enhance students' entrepreneurial self-efficacy, career planning, and decision-making skills?

## METHODS

**Research Design.** This study utilized a convergent parallel mixed methods research

design, allowing for a comprehensive analysis of career planning integration in entrepreneurship education by simultaneously collecting and analyzing independent quantitative and qualitative strands. The quantitative component employed a descriptive survey to systematically measure integration extent and effectiveness, while the qualitative component utilized semi-structured interviews and focus groups to explore personal narratives and experiential contexts.

**Population and Sampling.** Conducted during the 2024–2025 academic year at Shandong Vocational College of Animal Husbandry and Veterinary Medicine, this study evaluated career planning integration in entrepreneurship education. The sample included all 8 institutional entrepreneurship teachers and 390 third-year students. The student sample size was determined using Cochran's and Slovin's formulas to ensure statistical representativeness. Eligibility required teachers to have at least one year of subject experience, while student participants were required to be officially enrolled with at least one completed semester of entrepreneurship study. This dual-perspective approach provided a comprehensive analysis of instructional strategies and career readiness.

**Instrumentation.** The study utilized a survey questionnaire based on SCCT for quantitative data collection. This framework evaluated the interplay of personal and environmental factors across three primary variables: self-efficacy, outcome expectations, and interest. Each variable was assessed using a 5-point Likert scale, measuring teacher and student perceptions of confidence, future success, and personal engagement. To ensure structural integrity, the researcher conducted a pilot test to verify the instrument's reliability and validity before full-scale administration.

**Data Gathering Procedure.** This research followed a systematic four-step quantitative procedure to assess career planning integration. Participants, including 11 teachers and 390 students, were selected via Slovin's

formula based on specific enrollment criteria. The primary instrument, a 5-point Likert scale questionnaire, underwent expert validation and pilot testing, achieving a high Cronbach's alpha coefficient of 0.77. Surveys were distributed electronically through a secure online platform with clear instructions for completion. Throughout the study, the researcher maintained rigorous ethical standards and data security, monitoring response rates while storing all collected information in a protected database to ensure participant confidentiality.

**Data Analysis.** The study employed a four-step descriptive statistical analysis to examine career planning integration through the Social Cognitive Career Theory lens. Initially, data were cleaned, coded, and organized by variable to ensure reliability. Descriptive statistics, including frequency and percentage, summarized demographic profiles, while mean and standard deviation identified trends in self-efficacy, outcome expectations, and interest. Measurement accuracy was confirmed using the Cronbach's alpha coefficient, with scores above 0.70 signifying acceptable internal consistency. These statistical summaries provided the foundation for interpreting the extent of integration and generating evidence-based recommendations for a tailored career development program designed for vocational students.

## RESULTS

**Influence of Integrating Career Planning into Entrepreneurship Education on Students' Entrepreneurial Skills.** Table 1 illustrated that integrated career planning positively impacted student self-efficacy (Overall  $M = 4.09$ ). The highest-rated indicator was leadership skill development ( $M = 4.32$ ), which aligned with Jena (2020) regarding enhanced managerial abilities. High confidence in starting businesses ( $M = 4.24$ ) and resilience ( $M = 4.12$ ) supported Morselli's (2021) assertion that future-oriented perspectives promote adaptability. Students also reported confidence in financial decision-making ( $M = 4.08$ ) and business planning ( $M = 4.04$ ). However, independent problem-solving

scored lowest (M = 3.92), suggesting a need for experiential, scenario-based methodologies advocated by Ratten (2020) to bolster autonomous competence.

Table 1  
*Teachers Perceptions on the Integration of Career Planning into Entrepreneurship Education and Its Influence on Students' Entrepreneurial Skills in terms of Self-Efficacy*

Indicators	WM	SD	VI
Students are confident in starting their own business after career-integrated entrepreneurship education.	4.24	1.09	SA
Students believe they can develop effective business plans.	4.04	1.06	A
Students feel capable of solving business-related problems independently.	3.92	1.15	A
Students show increased leadership skills due to career-focused entrepreneurship training.	4.32	1.03	SA
Students demonstrate resilience when facing entrepreneurial challenges.	4.12	1.09	A
Students feel competent in identifying and exploiting market opportunities.	3.96	1.14	A
Students are confident in networking with potential clients and investors.	4	1	A
Students show confidence in making financial decisions for business ventures.	4.08	0.91	A
<b>Overall</b>	<b>4.09</b>	<b>1.06</b>	<b>A</b>

Table 2 revealed strong agreement (Overall M = 4.30) that integrated career planning positively shaped student outcome expectations. Improved employability (M = 4.44) underscored the value of transferable skills (Nabi et al., 2020), while high scores for flexibility and satisfaction (M = 4.36) highlighted entrepreneurship as a tool for autonomy (Fayolle et al., 2022). Strong results for community development (M = 4.32) and career viability (M = 4.28) aligned with socio-economic benefits identified by Ratten (2020). With positive views on networking (M = 4.20) and financial gains (M = 4.16), the data suggested that structured career planning empowered students to envision proactive, non-traditional success pathways.

Table 2  
*Teachers Perceptions on the Integration of Career Planning into Entrepreneurship Education and Its Influence on Students' Entrepreneurial Skills in terms of Outcome Expectations*

Indicators	WM	SD	VI
Students expect that entrepreneurship can lead to long-term career success.	4.24	0.88	SA
Students believe that entrepreneurial skills improve employability.	4.44	0.82	SA
Students foresee financial benefits from entrepreneurial activities.	4.16	0.9	A
Students anticipate personal satisfaction from pursuing entrepreneurial ventures.	4.36	0.91	SA
Students recognize entrepreneurship as a viable career path due to integrated career planning.	4.28	0.84	SA
Students believe entrepreneurship can contribute to community development.	4.32	0.8	SA
Students expect to develop a strong professional network through entrepreneurial activities.	4.2	0.82	SA
Students expect career flexibility and independence from entrepreneurial pursuits.	4.36	0.86	SA
<b>Overall</b>	<b>4.3</b>		<b>SA</b>

Table 3  
*Teachers and School Administrators on the Integration of Career Planning into Entrepreneurship Education and Its Influence on Students' Entrepreneurial Skills in terms of Interest*

Indicators	WM	SD	VI
Students express interest in joining entrepreneurship-related activities and programs.	4.24	0.97	SA
Students are eager to learn more about starting and managing a business.	4.32	0.9	SA
Students voluntarily participate in business plan competitions and similar events.	4.16	1.07	A
Students show enthusiasm when discussing entrepreneurial ideas.	4.2	1.12	SA
Students seek mentorship from entrepreneurs and business professionals.	4.16	1.14	A
Students show a sustained interest in entrepreneurship courses beyond requirements.	4.12	1.13	A
Students explore entrepreneurial career options during career counseling sessions.	4.16	0.94	A
Students demonstrate curiosity about innovation and business trends.	4.36	0.86	SA
<b>Overall</b>	<b>4.22</b>		<b>SA</b>

Table 3 illustrated that teachers and administrators perceived integrated career planning as a strong driver of entrepreneurial interest (Overall M = 4.22). Curiosity about innovation (M = 4.36) reflected proactive attitudes vital for dynamic careers (Fayolle et al., 2022). High ratings for business management eagerness (M = 4.32) and program interest (M = 4.24) supported assertions that career relevance increased participation (Ratten, 2020). Students showed enthusiasm for discussions (M = 4.20) and competitions (M = 4.16), confirming a motivation for practical application. However, lower scores for sustained interest (M = 4.12) suggested a need for hands-on tasks and mentorship advocated by Barba-Sánchez et al. (2022).

Table 4  
*Summary Statistics of Integrating Career Planning into Entrepreneurship and Its Influence on Students' Entrepreneurial Skill; Teachers and School Administrators Perspectives*

Dimension	WM	VI
Self-Efficacy	4.09	A
Outcome Expectations	4.30	SA
Interest	4.22	SA
<b>Grand Mean</b>	<b>4.20</b>	<b>SA</b>

Table 4 consolidated findings across self-efficacy, outcome expectations, and interest, highlighting career planning's impact. Outcome expectations (WM = 4.30) and interest (WM = 4.22) received the highest ratings, suggesting students anticipated career success and remained motivated. These results supported Nabi et al. (2020), who emphasized that integrated education fostered employability by linking skills with future opportunities. Meanwhile, self-efficacy (WM = 4.09) scored lower, reflecting general confidence but indicating a disparity. This suggested a need for experiential, problem-based approaches to strengthen independent skill application, echoing Ratten (2020) regarding the importance of hands-on training for handling real-world challenges with greater self-assurance.

Table 5 illustrated that integrated career planning positively influenced entrepreneurial self-efficacy (Overall M = 4.11). The highest-rated indicator was exposure to cutting-edge tools (M = 4.35), aligning with Fayolle et al. (2022) on innovation-based competence. Networking (M = 4.27) corroborated Morselli (2021) regarding mentorship, while project-based learning (M = 4.15) and career planning (M = 4.12) on hands-on learning. While interactive discussions (M = 4.04) contributed per Nabi et al. (2020), the lowest-rated item was external rewards (M = 3.85), suggesting students prioritized intrinsic motivators as noted by Fayolle et al. (2022). Overall, career-focused methods effectively strengthened self-efficacy.

Table 5  
*Students on the Integration of Career Planning into Entrepreneurship Education and Its Influence on Students' Entrepreneurial Skills in terms of Self Efficacy*

Indicators	WM	SD	VI
Project-based learning that involves real entrepreneurial tasks increases students' interest in entrepreneurship.	4.15	1.01	A
Gamification techniques in the classroom make entrepreneurship more engaging and interesting for students.	4.04	1.04	A
Collaborative group work on entrepreneurial projects sparks students' curiosity and interest in entrepreneurship.	4.04	1.08	A
Exposure to cutting-edge entrepreneurial tools and platforms increases student interest in innovation.	4.35	0.8	SA
Networking opportunities with entrepreneurs and business professionals generate more interest in entrepreneurship among students.	4.27	0.78	SA
Recognition and rewards for entrepreneurial achievements motivate students to stay engaged with the subject.	3.85	1.05	A
Interactive discussions and entrepreneurial events organized by the school maintain student interest in the subject.	4.04	0.96	A
Career planning sessions that tie entrepreneurship to future career options increase student interest in pursuing entrepreneurial paths.	4.12	0.91	A
<b>Overall Mean</b>	<b>4.11</b>	<b>0.95</b>	<b>A</b>

Table 6 showed that integrated career planning positively shaped student outcome expectations (Overall M = 4.30). Personal satisfaction (M = 4.42) was the highest-rated item, supporting Fayolle et al. (2022) on aligning motivation with values.

High scores for flexibility (M = 4.38) and community impact (M = 4.35) echoed Ratten (2020) regarding long-term commitment through social contribution. Students also recognized entrepreneurship as a viable path for employability (M = 4.31), aligning with Nabi et al. (2020). Finally, networking and financial expectations (M = 4.15) confirms that diverse social and economic factors served as significant motivators for students.

**Table 6**  
*Students on the Integration of Career Planning into Entrepreneurship Education and Its Influence on Students' Entrepreneurial Skills in terms of Outcome Expectations*

Indicators	WM	SD	VI
Students expect that entrepreneurship can lead to long-term career success.	4.31	0.79	SA
Students believe that entrepreneurial skills improve employability.	4.31	0.84	SA
Students foresee financial benefits from entrepreneurial activities.	4.15	0.92	A
Students anticipate personal satisfaction from pursuing entrepreneurial ventures.	4.42	0.76	SA
Students recognize entrepreneurship as a viable career path due to integrated career planning.	4.35	0.8	SA
Students believe entrepreneurship can contribute to community development.	4.35	0.8	SA
Students expect to develop a strong professional network through entrepreneurial activities.	4.15	0.83	A
Students expect career flexibility and independence from entrepreneurial pursuits.	4.38	0.75	SA
<b>Overall</b>	<b>4.3</b>	<b>0.81</b>	<b>SA</b>

Table 7 presented student perceptions of integrated career planning on entrepreneurial interest, yielding a strong overall weighted mean of 4.33. Eagerness to manage businesses and innovation curiosity (M = 4.46) suggested that career alignment stimulated intrinsic motivation, resonating with Fayolle et al. (2022). The desire for mentorship (M = 4.42) supported Morselli's (2021) assertion that practitioner exposure fueled enthusiasm. Furthermore, sustained interest (M = 4.31) and competition participation (M = 4.23) aligned with Nabi et al. (2020) regarding goal visibility. Though enthusiasm during discussions (M = 4.15) was lowest, it affirmed that integrated planning

fostered the motivation necessary for long-term career pursuit.

**Table 7**  
*Students on the Integration of Career Planning into Entrepreneurship Education and Its Influence on Students' Entrepreneurial Skills in terms of Interest*

Indicators	WM	SD	VI
I express interest in joining entrepreneurship-related activities and programs.	4.27	0.78	SA
I am eager to learn more about starting and managing a business.	4.46	0.71	SA
I voluntarily participate in business plan competitions and similar events.	4.23	0.95	SA
I show enthusiasm when discussing entrepreneurial ideas.	4.15	0.92	A
I seek mentorship from entrepreneurs and business professionals.	4.42	0.86	SA
I show a sustained interest in entrepreneurship courses beyond requirements.	4.31	0.84	SA
I explore entrepreneurial career options during career counseling sessions.	4.31	0.84	SA
I demonstrate curiosity about innovation and business trends.	4.46	0.81	SA
<b>Overall</b>	<b>4.33</b>	<b>0.84</b>	<b>SA</b>

Table 8 summarized the integration of career planning in entrepreneurial skills, revealing it was highly beneficial with a grand mean of 4.25. Interest (WM = 4.33) recorded the highest mean, indicating significantly heightened enthusiasm, followed by outcome expectations (WM = 4.30), reflecting strong belief in future success.

**Table 8**  
*Summary Statistics on Integrating Career Planning in Students' Entrepreneurial Skills; Students' Perspectives*

Indicators	WM	VI
Self-Efficacy	4.11	A
Outcome Expectations	4.30	SA
Interest	4.33	SA
<b>Grand Mean</b>	<b>4.25</b>	<b>SA</b>

Meanwhile, self-efficacy (WM = 4.11) suggested that while integration build confidence, more experiential learning was needed to bolster self-belief; this was supported by Morselli (2021), who asserted that self-efficacy developed best through real-world tasks and

feedback. Ultimately, results demonstrated that integrating career planning enhanced the motivation, confidence, and mindset necessary for entrepreneurial readiness.

**Challenges Students Face When Integrating Career Planning into Entrepreneurship Education.** Table 9 summarized educator insights on barriers hindering student entrepreneurial self-efficacy. Teachers reported that students doubted their ability to apply concepts and feared failure (T1, T5), aligning with Gimarino (2024). Educators emphasized that heavy workloads limited mastery (T3, T4), a gap noted by Ye and Kang (2025) and Wang et al. (2023).

**Table 9**  
*Teachers' Perspectives on the Challenges Students Faced Integrating Career Planning into Entrepreneurship Education in Terms of Self-Efficacy*

Theme	Codes	Sample Responses
Lack of Confidence in Applying Knowledge	Doubt in ability, low confidence, weak self-belief, fear of failure	Many students doubt their own abilities. Even if they learn entrepreneurial concepts, they are unsure if they can apply these skills in real-life situations. (T1) Fear of failure is a major barrier. Many students think their business ideas will not work, so they avoid taking risks. (T5)
Limited Mastery and Practice Opportunities	Lack of mastery, insufficient practice, absence of real-world exposure	Students are overwhelmed with schoolwork and cannot dedicate enough time to build entrepreneurial skills. Because they do not practice, they don't develop mastery. (T3) They can memorize concepts but lack the real-world experience to test their skills. This gap lowers their self-efficacy. (T4)
Absence of Role Models and Mentorship	Lack of vicarious experiences, weak guidance, missing models of success	Without seeing models or mentors who succeeded in entrepreneurship, they feel less capable of pursuing their own career goals. (T2) Career planning and entrepreneurship are often separated in teaching. Without clear integration, students don't feel confident in linking the two. (T8)
Instability of Career Goals	Changing interests, inconsistent goals, uncertainty in direction	When they change paths frequently, they feel inconsistent and unsure of themselves, which makes it harder to build strong confidence. (T6)
Inequality in Access to Resources	Limited resources, unequal opportunities, access barriers	Those who cannot attend workshops or trainings feel less competent compared to their peers, which lowers their confidence in applying career planning. (T7)

Furthermore, the absence of role models (T2, T8) prevented students from envisioning

success, as identified by Gao and Lu (2024). Unstable goals (T6) and unequal resource access (T7) further lowered competence, mirroring findings by Gimarino (2024) and Wang et al. (2023).

**Table 10**  
*Teachers' Perspectives on the Challenges Students Faced Integrating Career Planning into Entrepreneurship Education in Terms of Outcome Expectations*

Themes	Codes	Sample Responses
Unrealistic or Overly Ideal Expectations	Expecting guaranteed success, assuming entrepreneurship ensures career achievement	Students often have unrealistic expectations. They believe that entrepreneurship education will directly guarantee success in their chosen careers, but when outcomes are not as they imagined, their motivation drops. (T2)
Focus on Immediate Results	Desire for instant outcomes, impatience, discouragement when results are delayed	Many students expect immediate results when they apply entrepreneurial lessons to their career planning. When they don't see quick outcomes, they become discouraged and think their efforts are pointless. (T1) Students often underestimate the time and effort needed to achieve career goals through entrepreneurship. When the expected outcomes take longer, they lose patience and confidence. (T8)
Difficulty Linking Short-Term Actions to Long-Term Outcomes	Struggling to connect tasks with gradual benefits, lack of appreciation for long-term rewards	Some students struggle to connect the long-term benefits of career planning with the short-term tasks in entrepreneurship education. They focus more on instant rewards and fail to appreciate the gradual outcomes. (T3)
Lack of Tangible Role Models and Success Stories	Vague expectations, idealized visions without real examples	A challenge I observe is that students lack exposure to real career outcomes of entrepreneurship. Since they don't see tangible success stories from alumni or role models, their expectations remain vague or sometimes too idealistic. (T4)
Mismatch Between Expectations and Realities of Entrepreneurship	Frustration with risks, instability, income uncertainty	Students become frustrated when their expectations about career stability and income don't match the uncertainties of entrepreneurship. They sometimes abandon the integration process because they feel the risks outweigh the potential outcomes. (T5)
Influence of Family and Peers	Expectations shaped by external opinions, negative social comparisons	Outcome expectations are shaped by family and peers. If students hear negative stories about entrepreneurship, they assume their own career plans will fail, which lowers their drive to integrate planning with entrepreneurship education. (T6)
Narrow Definition of Success	Viewing entrepreneurship only in financial terms, overlooking skill and personal growth outcomes	Many students equate entrepreneurship with financial success alone. When career planning activities emphasize personal growth or skill-building instead of immediate profit, students struggle to see the value. (T7)

Table 10 detailed educator observations regarding cognitive and social barriers hindering realistic entrepreneurial expectations. Teachers highlighted that students expected immediate success, leading to demotivation when results were delayed (T1, T2, T8), as identified by Rezky and Lilis (2025). Lack of role models left expectations vague or profit-focused (T4, T7), supporting Ozyazici et al. (2025). Educators reported students felt discouraged when stability expectations clashed with field uncertainties (T5), while

negative social influences lowered confidence (T6). These observations aligned with Charokopaki et al. (2025) on perceived risk and Rezky and Lilis (2025) on how social influences and prior experiences shaped career outcome interpretations.

**Table 11**  
*Teachers' Perspectives on the Challenges Students Faced Integrating Career Planning into Entrepreneurship Education in Terms of Outcome Expectations*

Themes	Codes	Sample Responses
Lack of Engagement and Practical Application	Too theoretical, boring content, missing real-world relevance	Many students lose interest because they see entrepreneurship as too theoretical. Without engaging activities or real-life applications, their curiosity fades quickly. (T1)
Misalignment with Personal Passions and Career Tracks	No connection to chosen strand, mismatch with personal goals, low relevance	Interest is reduced when students feel that entrepreneurship education does not align with their personal passions or chosen career track. If they don't see a connection, they disengage. (T3)
Competing Priorities and Distractions	Academic overload, extracurricular commitments, lack of time	I notice that students often get distracted by other academic and extracurricular demands. Since entrepreneurship requires consistent attention, their interest drops when competing priorities take over. (T4)
Stereotypes and Perceptions of Entrepreneurship	Belief that entrepreneurship is only for "business-minded" students, exclusion mindset	A challenge is that some students believe entrepreneurship is only for "business-minded" individuals. If they don't identify as entrepreneurial, they show little interest in integrating it into career planning. (T5)
Lack of Role Models and Inspiration	Limited alumni/peer examples, weak exposure to success stories	Limited exposure to entrepreneurial role models also affects interest. Without seeing peers or alumni succeed, students lack inspiration to pursue entrepreneurship as part of their career plans. (T6) Students lose interest when they encounter failures in entrepreneurship activities. Instead of seeing these as learning opportunities, they feel discouraged and step back. (T7) Sometimes students initially show excitement, but the lack of visible short-term outcomes lowers their sustained interest. They want quick results, and when they don't see them, their enthusiasm fades. (T8)
Discouragement from Failures and Lack of Short-Term Results	Low resilience, impatience, discouragement from setbacks	

Table 11 provided an overview of educator feedback regarding hurdles impeding student entrepreneurial interest. Teachers observed that students lost interest when content was theoretical and disconnected (T1), mirroring Hartika (2023). Disengagement occurred when activities failed to align with personal passions (T3), a sentiment confirmed by Burhanudin, et al. (2025). Educators reported that heavy workloads (T4) caused interest to fade, highlighting the need for institutional support (Hartika, 2023). Perceptions of exclusivity (T5) and a lack of role models (T6) acted as

deterrents, echoing Burhanudin et al. (2025). Finally, discouragement from setbacks (T7, T8) reinforced Hartika's (2023) conclusion that training must emphasize resilience.

**Table 12**  
*Analysis of Challenges Students Face When Integrating Career Planning into Entrepreneurship Education*

Dimension	Themes	Codes	Sample Responses
Self-Efficacy	Confidence and Stability	Doubt in ability, fear of failure, shifting interests	Students lack confidence in applying concepts and fear failure, which discourages them from pursuing entrepreneurial tasks (T1, T5). Frequent changes in career interests also create instability and weaken persistence (T6).
	Access and Practice Opportunities	Theoretical focus, lack of real-world exposure, unequal resources	Lessons are often too theoretical, with limited opportunities for practice (T3, T4). Unequal access to workshops and trainings makes some students feel less capable than their peers (T7).
	Unrealistic and Risk-Related Views	Expecting guaranteed success, impatience, fear of risk	Students expect immediate or guaranteed results, and when these do not happen, their motivation declines (T1, T2, T8). They also become discouraged by the risks and uncertainties of entrepreneurship (T5).
Outcome Expectations	Perceptions of Success and Social Influence	Profit-only mindset, vague expectations, family/peer pressure	Students equate entrepreneurship with financial success alone and overlook non-monetary benefits (T7). Their expectations are often vague or idealized, and negative family or peer influence lowers their confidence (T4, T6).
	Engagement and Relevance	Too theoretical, not aligned with passions, competing priorities	Students lose interest when entrepreneurship is presented as too theoretical and disconnected from their passions or tracks (T1, T3). Heavy academic loads and extracurricular activities further reduce engagement (T4).
Interest	Sustained Motivation and Role Models	Discouragement from failure, impatience, lack of mentors	Students lose enthusiasm when they encounter setbacks or do not see quick results (T7, T8). Limited exposure to role models and success stories reduces their sustained interest (T6).

Table 12 provided a thematic analysis of educator difficulties when merging career guidance with entrepreneurial instruction. Under Theme 1, teachers observed that students struggled with confidence and limited mastery, doubting their ability to apply concepts (T1) and fearing failure (T5). This was compounded by shifting interests (T6), workloads (T3), memorization (T4), and unequal access (T7). Theme 2 highlighted unrealistic views and social pressures; students expected immediate success (T1, T2) and felt discouraged by uncertainties (T5, T8). Educators noted profit-only focuses (T7), lack of role models (T4), and negative influences (T6). Theme 3 revealed interest waned due to low engagement (T1, T3), competing priorities (T4), and lack of resilience (T7, T8, T6).

Table 13 detailed qualitative feedback from students regarding obstacles to developing

entrepreneurial self-efficacy. Students revealed that self-confidence was a significant barrier, as several admitted doubting their ability to apply concepts (S1) or felt discouraged by failures (S2). These findings aligned with Rezky and Lilis (2025), who emphasized that self-efficacy played a critical role in shaping intention; when confidence was weak, persistence declined. Additionally, students stressed that lessons were too theoretical with limited practice opportunities (S3). Unequal training access also made some feel disadvantaged (S7), echoing Ozyazici et al. (2025) on the necessity of structured practice and authentic experiences to strengthen self-efficacy.

Table 13  
*Students' Perspectives on the Challenges Faced Integrating Career Planning into Entrepreneurship Education in Terms of Self-Efficacy*

Themes	Codes	Sample Student Responses
Lack of Confidence and Resilience	Doubt, fear of failure, risk hesitation	"I feel I can't apply concepts in real life" (S1). Failures damage confidence (S2) and cause hesitation in decision-making (S8).
Limited Practice and Unequal Access	Theory-heavy, unequal training/resources	Lessons are too theoretical (S3). Lack of practice (S6) and unequal access to training (S7) create a sense of being "left behind."

Table 14 presented qualitative insights regarding students' challenges in forming realistic outcome expectations. Students reported unrealistic expectations about results (S1, S2), aligning with Rezky and Lilis (2025), who found that prior experiences often shaped assumptions, leading to discouragement when outcomes did not match. Equally important were narrow perceptions and external influences (S3, S5). A lack of role models also left students uncertain (S6). These challenges were consistent with Charokopaki et al. (2025), who highlighted that optimism, role models, and supportive environments shaped outcome expectations. Without such supports, students' expectations remained vague or overly negative, hindering their long-term entrepreneurial outlook.

Table 14  
*Students' Perspectives on the Challenges Faced Integrating Career Planning into Entrepreneurship Education in Terms of Outcome Expectations*

Themes	Codes	Sample Responses
Unrealistic and Risk-Influenced Views	Quick-win bias, success guarantee, risk aversion	I expect fast results, but when I don't see them, I lose motivation. (S1) Sometimes I think entrepreneurship will guarantee me success. (S2) I feel unmotivated when the risks seem higher than the rewards. (S7)
Narrow Perceptions and Social Influence	Profit-only focus, social/family pressure	I believe success is only about making money. (S3) My family tells me entrepreneurship is unstable. (S5) We don't have enough role models to look up to. (S6)

Table 15 revealed that students described low interest when entrepreneurship felt irrelevant or overly theoretical (S1), where boredom occurred when lessons did not connect to personal interests. Some preferred activities over lectures (S3), mirroring Hartika (2023), who found that interest improved when programs were interactive but declined when dominated by lectures.

Table 15  
*Students' Perspectives on the Challenges Faced Integrating Career Planning into Entrepreneurship Education in Terms of Interest*

Themes	Codes	Sample Responses
Low Engagement and Relevance	Theory boredom, lack of passion, activity preference	"I get bored when lessons don't connect to my passions." (S1) "I'm more interested when we do activities, but not when it's just lectures." (S3)
Competing Priorities and Weak Motivation	Academic overload, distractions, impatience	"I prioritize passing my other subjects, so entrepreneurship tasks come last." (S4) "My extracurricular activities take up time, so I can't give full focus." (S5) "I want quick results—when I don't see them, my excitement fades." (S8)

Competing priorities emerged as a barrier, where other subjects were prioritized (S4) and heavy schoolwork caused interest and engagement to drop (S8).

This was consistent with Burhanudin, et al. (2025). Moreover, discouragement from failure weakened motivation (S6), reflecting Tocalo (2024), who emphasized that sustained motivation was tied to resilience and supportive environments.

Table 16  
*Analysis of Challenges Themes in Integrating Career Planning into Entrepreneurship Education*

Dimension	Themes	Codes	Analysis of Challenges
Self-Efficacy	Confidence and Resilience Gaps	Doubt, fear of failure, risk aversion	Students doubt their ability to apply concepts (S1); lose confidence upon failure (S2, S5). Lack of resilience leads to risk hesitation and weak persistence (S8).
	Limited Practice and Access	Theory-heavy, lack of mastery, unequal resources	Lessons are overly theoretical and disconnected from practice (S3). Limited opportunities (S6), shifting goals (S4), and unequal access to training (S7) reduce competence.
Outcome Expectations	Unrealistic & Risk-Driven Views	Quick results bias, guaranteed success mindset	Expectations of "quick wins" (S1, S2) lead to demotivation with delayed results. Negative failure stories (S4) and high perceived risks (S7) discourage engagement.
	Narrow Perceptions	Profit-only mindset, social/family influence	Many equate success only with financial gain (S3). Negative family views on instability (S5) and a lack of role models (S6, S8) weaken perceived value.
Interest	Low Engagement and Relevance	Theoretical boredom, misalignment with passion	Interest drops when content is abstract (S1, S2). Students prefer hands-on activities over lectures (S3); lack of role models hinders sustained engagement (S7).
	Competing Priorities and Weak Motivation	Academic overload, weak motivation	High workloads (S4) and extracurricular demands (S5) sideline entrepreneurship. Past failures (S6) and impatience for results (S8) further lower enthusiasm.

Table 16 identified three critical barriers to student development. Under Theme 1, students struggled with confidence and limited mastery, doubting their ability to apply concepts (S1) or losing confidence after failure (S2, S5). Fear of mistakes (S8), theoretical lessons (S3), and unequal training access (S7) hindered self-efficacy. Theme 2 highlighted unrealistic expectations and social pressures; students expected quick success (S1, S2) and felt discouraged by failure stories (S4) or family perceptions of instability (S5). Lack of role models (S6) and a profit-only focus (S3) resulted in vague expectations (S8). Finally, Theme 3 revealed low engagement due to disconnected lessons (S1, S2) and competing academic priorities (S4, S5).

**Strategies to Overcome the Challenges of Integrating Career Planning into Entrepreneurship Education.** Table 17 illustrated that teachers and administrators strongly supported strategies to enhance entrepreneurial self-efficacy, with real-world experiences like internships receiving the highest mean (M = 4.48). Exposure to role models and career planning integration both scored 4.40, reinforcing Morselli (2021) regarding the motivational effect of firsthand journeys.

Table 17  
*Teachers' Strategies to Overcome Challenges in Integrating Career Planning into Entrepreneurship Education in terms of Self-Efficacy*

Indicators	WM	SD	VI
Mentorship programs with successful entrepreneurs improve students' belief in their ability to succeed.	4.32	0.8	SA
Real-world experience, such as internships and business incubators, builds students' confidence in entrepreneurship.	4.48	0.87	SA
Exposure to successful role models increases students' self-efficacy in starting their businesses.	4.4	0.76	SA
Practical assignments and business plan competitions allow students to gain confidence in handling entrepreneurial tasks.	4.44	0.82	SA
Students become more resilient and confident when they face entrepreneurial challenges through training.	4.28	1.06	SA
Entrepreneurial simulations help students feel more competent in solving real-world business problems.	4.28	0.94	SA
Career planning integrated into entrepreneurship courses boosts students' confidence in business decision-making.	4.4	0.96	SA
Students demonstrate increased leadership and management capabilities because of career planning in entrepreneurship education.	4.4	0.82	SA
<b>Overall</b>	<b>4.38</b>	<b>0.88</b>	<b>A</b>

Practical assignments and competitions (M = 4.44) allowed students to apply learning, while mentorship (M = 4.32) reduced anxiety per Ratten (2020). Collectively, these strategies ensured students believed in their capacity to succeed, affirming that immersive simulations were critical for entrepreneurial readiness.

Table 18 presented perspectives on strategies for enhancing entrepreneurial outcome expectations, yielding a strong overall weighted mean of 4.36.

Indicators such as alumni networks and setting realistic goals (M = 4.40) suggested that concrete examples were crucial for visualizing success, aligning with Nabi et al. (2020). High scores for clear curriculum communication (M = 4.36) and guest lectures (M = 4.28) supported assertions by Morselli (2021) and Ratten (2020) that practitioner interaction strengthened clarity. Career counseling (M = 4.20) and aligned instruction (M = 4.32) reinforced commitment to entrepreneurial pathways. Collectively, these results supported a future-oriented model empowering students to envision entrepreneurship as a viable career.

Table 18  
*Teachers' Strategies to Overcome Challenges in Integrating Career Planning into Entrepreneurship Education in terms of Outcome Expectations*

Indicators	WM	SD	VI
Clear communication of career benefits through the curriculum helps students understand the long-term advantages of entrepreneurship.	4.36	0.81	SA
Guest lectures from industry experts demonstrate the real-world financial and career benefits of entrepreneurship.	4.28	0.84	SA
Career counseling sessions effectively clarify the link between entrepreneurship education and employability.	4.2	1.08	SA
Alumni networks showing entrepreneurial success help students see the practical outcomes of their education.	4.4	0.87	SA
Students are better able to set realistic career goals after learning about the diverse career paths entrepreneurship offers.	4.4	0.87	SA
Exposure to various entrepreneurial sectors strengthens students' understanding of the career opportunities available to them.	4.4	0.91	SA
Career planning activities embedded in entrepreneurship education increase students' awareness of the rewards and risks of starting a business.	4.48	0.77	SA
Students' understanding of entrepreneurship as a viable career path is enhanced through clear career outcome expectations.	4.32	0.85	SA
<b>Overall</b>	<b>4.36</b>	<b>0.88</b>	<b>SA</b>

Table 19 presented perceptions of strategies for addressing student interest, yielding an overall weighted mean of 4.35. The highest-rated indicator was exposure to cutting-edge entrepreneurial tools (M = 4.52), supporting Fayolle et al. (2022) on digital innovation. Project-based learning (M = 4.36) and career

planning (M = 4.36) served as key drivers of autonomy, resonating with Barba-Sánchez et al. (2022) and Morselli (2021). Interactive discussions and recognition (M = 4.40) functioned as vital motivational tools per Nabi et al. (2020). Finally, gamification (M = 4.28) and collaborative work (M = 4.12) sustained interest, echoing Ratten (2020) on the efficacy of peer learning and creativity.

Table 19  
*Teachers' Strategies to Overcome Challenges in Integrating Career Planning into Entrepreneurship Education in terms of Interest*

Indicators	WM	SD	VI
Project-based learning that involves real entrepreneurial tasks increases students' interest in entrepreneurship.	4.36	0.81	SA
Gamification techniques in the classroom make entrepreneurship more engaging and interesting for students.	4.28	0.89	SA
Collaborative group work on entrepreneurial projects sparks students' curiosity and interest in entrepreneurship.	4.12	0.97	A
Exposure to cutting-edge entrepreneurial tools and platforms increases student interest in innovation.	4.52	0.77	SA
Networking opportunities with entrepreneurs and business professionals generate more interest in entrepreneurship among students.	4.36	0.76	SA
Recognition and rewards for entrepreneurial achievements motivate students to stay engaged with the subject.	4.4	0.87	SA
Interactive discussions and entrepreneurial events organized by the school maintain student interest in the subject.	4.4	0.82	SA
Career planning sessions that tie entrepreneurship to future career options increase student interest in pursuing entrepreneurial paths.	4.36	0.86	SA
<b>Overall</b>	<b>4.35</b>	<b>0.85</b>	<b>SA</b>

Table 20 consolidated educator perceptions regarding strategies to overcome career planning integration challenges, yielding a composite mean of 4.36. Regarding self-efficacy, educators agreed that mentorship and real-world experiences build confidence, while Morselli (2021) and Ratten (2020) underscored how role models reduced fear. For outcome expectations, structured messaging and

sectoral exposure developed realistic views, aligning with Nabi et al. (2020), Morselli (2021), and Ratten (2020).

Table 20  
*Summary of Teachers and School Administrators' Strategies to Overcome Challenges in Integrating Career Planning into Entrepreneurship Education*

Indicators	WM	VI
Self-Efficacy	4.38	SA
Outcome Expectations	4.36	SA
Interest	4.35	SA
<b>Grand Mean</b>	<b>4.36</b>	<b>SA</b>

Furthermore, high interest scores indicated that project-based learning and technological tools sustained enthusiasm, reinforcing Fayolle et al. (2022) and Nabi et al. (2020). Ultimately, educators viewed career-aligned strategies as highly effective.

**Proposed Career Development Programs in Entrepreneurship Education to Effectively Enhance Students' Entrepreneurial Self-Efficacy, Career Planning and Decision-Making Skills.** In today's dynamic and uncertain world of work, entrepreneurship is no longer confined to business ownership but has evolved into a mindset and skill set that applies across all career paths. Recognizing this, the integration of career planning into entrepreneurship education plays a vital role in equipping students with the tools, knowledge, and confidence to pursue meaningful careers. The "Pathways to Purpose" Career Development Program is a structured intervention that complements entrepreneurship education by helping students explore career options, align personal interests with business opportunities, and develop actionable plans for their future.

**Rationale.** While entrepreneurship education equips students with innovation, leadership, and problem-solving skills, many still struggle to connect these skills to real-world career pathways. Research shows that students face challenges such as unclear career goals, low entrepreneurial confidence, lack of mentorship, and limited practical exposure (Fayolle et al., 2022; Morselli, 2021).

This career development program addresses those gaps by integrating structured career planning within the entrepreneurship curriculum. It provides students with the guidance, exposure, and tools necessary to make informed decisions about their future, whether they choose to become entrepreneurs or pursue entrepreneurship-related careers.

**Program Objectives.** The general objective of this program is to enhance students' career preparedness and entrepreneurial competencies through an integrated, experience-based career development initiative embedded in entrepreneurship education. Specifically, the program aims to:

1. Help students identify and clarify their personal career interests, values, and goals.
2. Increase students' understanding of diverse career options related to entrepreneurship.
3. Develop students' self-efficacy in entrepreneurial skills such as business planning, innovation, and decision-making.
4. Promote interest in entrepreneurship through hands-on, career-aligned learning experiences.
5. Connect students with mentors, role models, and professional networks in various entrepreneurial fields.
6. Enable students to create a personalized career and entrepreneurship action plan.

**Scope of the Program.** The program is designed for senior high school or tertiary-level students enrolled in entrepreneurship or business-related subjects. It will be implemented over the course of one academic semester and consists of the following components:

1. **Career Exploration Modules.** Self-assessments, career visioning, and identification of entrepreneurial career clusters.

2. **Mentorship and Guest Speaker Series.** Monthly sessions with entrepreneurs, alumni, and career professionals.
3. **Project-Based Learning.** Integration of student-led business projects aligned with personal career goals.
4. **Business Immersion Opportunities.** Field visits, virtual internships, or simulation activities.
5. **Career Planning Workshops.** Resume writing, business pitching, networking, and goal-setting sessions.
6. **Capstone Presentation.** Students will present a personalized Career and Business Plan reflecting their aspirations, competencies, and strategic action steps.

This program will be implemented in collaboration with entrepreneurship teachers,

school career guidance counselors, industry partners, and alumni networks.

Table 21 presents the proposed Career Development Program for Academic Year 2026–2027. This is a structured intervention designed to transition entrepreneurship into a versatile mindset. The rationale stemmed from findings that students struggled to connect technical skills to real-world pathways due to unclear goals and low confidence (Fayolle et al., 2022; Morselli, 2021).

The program established objectives to clarify interests and bolster self-efficacy through career-aligned experiences. Spanning one semester, the scope integrated exploration modules, mentorship, and business immersion.

By concluding with a personalized career plan, the program aimed to empower students to navigate the labor market with strategic clarity and professional confidence.

Table 21  
*Proposed Development Program for Academic Year 2026–2027 (“Pathways to Purpose”)*

KRA (Challenge)	Objective	Key Activities	Strategies	Persons Involved	Timeline	Budget (¥)	KPI
<b>1. Self-Awareness</b> <i>(Challenge: Lack of career direction &amp; poor self-awareness)</i>	Assess strengths and interests	- Self-assessments, Visioning & Strengths Workshop	Use guided reflection tools and interactive coaching sessions	Career Counselors, Homeroom Advisers, Entrepreneurship Teachers	Weeks 1–3	1,500	90% profile completion
<b>2. Goal Alignment</b> <i>(Misalignment)</i>	Bridge aspirations with business	Career mapping, “Career Fit” workshops	Conduct goal-matching exercises using real case studies and local examples	Teacher and Guest Entrepreneurs	Weeks 3–4	1,000	80% path articulation
<b>3. Mentorship</b> <i>(Limited Access)</i>	Connect with role models	Mentorship matching, Alumni speaker series	Invite alumni and entrepreneurs to speak, host Q&A panels, and provide 1:1 mentoring	Alumni, Local Entrepreneurs, School Admin	Monthly (Weeks 5, 8, 11)	3,000	3 events; 90% attendance
<b>4. Practical Exposure</b> <i>(Limited practical exposure)</i>	Experience real business	Simulations, Field visits, Mini-internships	Coordinate with local businesses and use online platforms for simulations	Industry Partners	Weeks 6–10	5,500	100% completion rate
<b>5. Confidence</b> <i>(Low engagement)</i>	Boost self-efficacy	Pitch contests, Awards, Portfolio defense	Create safe spaces for feedback and reward progress and effort	Teachers, Judges Panel, School Leaders	Weeks 11–15	6,000	85% final presentation

## DISCUSSION

This study investigated the integration of career planning into entrepreneurship education as a foundation for a comprehensive career development program, addressing four key research questions through a mixed-methods approach. The findings revealed that while teachers and administrators perceived the integration as effective in enhancing entrepreneurial skills—particularly in fostering outcome expectations and interest—significant challenges remained due to students' low self-efficacy, unrealistic expectations, and waning engagement. Despite these hurdles, educators expressed strong agreement that their current strategies were effective in supporting students. Consequently, the proposed "Pathways to Purpose" Career Development Program was designed to bridge the gap between theory and practice, ensuring that entrepreneurship education becomes truly transformative by empowering students to navigate their futures with purpose.

Anchored in SCCT, the conclusion emphasized that although students demonstrated high baseline levels of interest and self-efficacy, their development was often hindered by limited practical exposure, a lack of mentorship, and competing academic priorities. SCCT posits that career development is only sustained when cognitive factors are reinforced by supportive environments; therefore, the study showed that mentorship and goal alignment are critical to strengthening entrepreneurial pathways. To address these findings, it is recommended that students proactively engage in skills-based workshops and self-assessment tools to build confidence, while teachers should incorporate reflective goal-setting and experiential learning activities that connect classroom content to future professional aspirations.

Furthermore, the study provided strategic recommendations for school administrators to institutionalize structured career development programs that align with entrepreneurship instruction. This includes providing specialized professional development for faculty,

establishing robust industry linkages, and allocating academic resources for business immersion and mentorship systems. By fostering a holistic educational environment that balances technical competence with career clarity, institutions can better prepare students for the complexities of the modern labor market. Ultimately, this integrated approach ensures that the next generation of entrepreneurs is equipped not only with business sense but also with the resilience and strategic vision necessary to contribute to long-term economic development.

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## REFERENCES

- Adebusuyi, A. S., Adebusuyi, O. F., & Kolade, O. (2022). Development and validation of sources of entrepreneurial self-efficacy and outcome expectations: A social cognitive career theory perspective. *The International Journal of Management Education*, 20(2), 100572. <https://doi.org/10.1016/j.ijme.2022.100572>

- Barba-Sánchez, V., Mitre-Aranda, M., & del Brío-González, J. (2022). The entrepreneurial intention of university students: An environmental perspective. *European Research on Management and Business Economics*, 28(2), 100184. <https://doi.org/10.1016/j.iedeen.2021.100184>
- Boutaky, S., & Sahib Eddine, A. (2023). Determinants of entrepreneurial intention among scientific students: A social cognitive theory perspective. *Industry and Higher Education*, 37(2), 279–293. <https://doi.org/10.1177/09504222221107878>
- Burhanudin, M. A., Sojanah, J., & Utama, D. H. (2025). Entrepreneurship education and entrepreneurial interest among students. *Journal of Research in Instructional*, 5(1), 210–224. <https://doi.org/10.21831/jri.v5i1.78965>
- Charokopaki, E., Gkika, S., Giannoulakis, S., & Papadakis, S. (2025). Optimism, general self-efficacy, and entrepreneurial outcome expectations. *Administrative Sciences*, 15(7), 242. <https://doi.org/10.3390/admsci15070242>
- Chukwuedo, S. O., & Ementa, C. N. (2022). Students' work placement learning and employability nexus: Reflections from experiential learning and social cognitive career theories. *Industry and Higher Education*, 36(6), 742–755. <https://doi.org/10.1177/09504222221102688>
- Deveci, İ. (2022). Review of entrepreneurship education literature in educational contexts: Bibliometric analysis. *Participatory Educational Research*, 9(1), 214–232. <https://doi.org/10.17275/per.22.6.9.1>
- Do Nguyen, Q., & Nguyen, H. T. (2023). Entrepreneurship education and entrepreneurial intention: The mediating role of entrepreneurial capacity. *The International Journal of Management Education*, 27(1), 100730. <https://doi.org/10.1016/j.ijme.2022.100730>
- Fayolle, A., Verzat, C., & Wapshott, R. (2022). In praise of relevance: Bridging the gap between entrepreneurship education and business practice. *Entrepreneurship & Regional Development*, 34(1–2), 1–18. <https://doi.org/10.1080/08985626.2021.1894257>
- Gao, Y., & Lu, J. (2024). Entrepreneurship education and self-efficacy among Chinese college students mediated by harmonious passion and moderated by parental psychological control. *Scientific Reports*, 14(1), 25534. <https://doi.org/10.1038/s41598-024-83426-z>
- Gao, Y., & Qin, X. (2022). Entrepreneurship education and entrepreneurial intention of Chinese college students: Evidence from a moderated multi-mediation model. *Frontiers in Psychology*, 13, 1049232. <https://doi.org/10.3389/fpsyg.2022.1049232>
- Gimarino, E. T. (2024). Career choice and self-efficacy toward senior high school students' career goals in the Philippines. *Indonesian Journal of Education Research*, 5(5), 187–195. <https://doi.org/10.37251/ijoe.v5i5.1079>
- Haneberg, D. H., Aaboen, L., & Middleton, K. W. (2022). Teaching and facilitating action-based entrepreneurship education: Addressing challenges towards a research agenda. *The International Journal of Management Education*, 20(3), 100711. <https://doi.org/10.1016/j.ijme.2022.100711>
- Hartika, N. (2023). Increasing student entrepreneurship interest through entrepreneurship skills training program in higher education in Banten. *Journal of Research in Instructional*, 3(2), 145–156. <https://doi.org/10.30862/jri.v3i2.456>

- Huang, Y., Zhang, Y., Long, Z., Xu, D., & Zhu, R. (2022). How to improve entrepreneurship education in "double high-level plan" higher vocational colleges in China. *Frontiers in Psychology, 12*, 743997. <https://doi.org/10.3389/fpsyg.2021.743997>
- Hou, F., Qi, M. D., Su, Y., Wu, Y. J., & Tang, J. Y. (2023). How does university-based entrepreneurship education facilitate the development of entrepreneurial intention? Integrating passion- and competency-based perspectives. *The International Journal of Management Education, 21*(2), 100798. <https://doi.org/10.1016/j.ijme.2023.100798>
- Jena, R. K. (2020). Measuring the impact of business management student's attitude towards entrepreneurship education on entrepreneurial intention: A case study. *Computers in Human Behavior, 107*, 106275. <https://doi.org/10.1016/j.chb.2020.106275>
- Jin, Y. (2022). Analysis of college students' entrepreneurship education and entrepreneurial psychological quality from the perspective of ideological and political education. *Frontiers in Psychology, 13*, 739353. <https://doi.org/10.3389/fpsyg.2022.739353>
- Liao, Y. K., Nguyen, V. H. A., Chi, H. K., & Nguyen, H. H. (2022). Unraveling the direct and indirect effects of entrepreneurial education and mindset on entrepreneurial intention: The moderating role of entrepreneurial passion. *Global Business and Organizational Excellence, 41*(3), 23–40. <https://doi.org/10.1002/joe.22143>
- Maheshwari, G., Kha, K. L., & Arokiasamy, A. R. A. (2023). Factors affecting students' entrepreneurial intentions: A systematic review (2005–2022) for future directions in theory and practice. *Management Review Quarterly, 73*(4), 1903–1970. <https://doi.org/10.1007/s11301-023-00288-3>
- Mei, W., & Symaco, L. (2022). University-wide entrepreneurship education in China's higher education institutions: Issues and challenges. *Studies in Higher Education, 47*(1), 177–193. <https://doi.org/10.1080/03075079.2020.1793936>
- Morselli, D. (2021). The role of self-efficacy in supporting career planning and entrepreneurship education. *Education + Training, 63*(1), 41–60. <https://doi.org/10.1108/ET-12-2019-0276>
- Motta, V. F., & Galina, S. V. R. (2023). Experiential learning in entrepreneurship education: A systematic literature review. *Teaching and Teacher Education, 121*, 103919. <https://doi.org/10.1016/j.tate.2022.103919>
- Nabi, G., Walmsley, A., Liñán, F., Akhtar, I., & Neame, C. (2020). Does entrepreneurship education in the first year of higher education develop entrepreneurial intentions? The role of learning and inspiration. *Studies in Higher Education, 45*(3), 439–457. <https://doi.org/10.1080/03075079.2018.1539357>
- Nave, E., & Ferreira, J. J. (2022). A systematic international entrepreneurship review and future research agenda. *Cross Cultural & Strategic Management, 29*(3), 639–674. <https://doi.org/10.1108/CCSM-01-2021-0011>
- Nwosu, H. E., Obidike, P. C., Ugwu, J. N., Udeze, C. C., & Okolie, U. C. (2022). Applying social cognitive theory to placement learning in business firms and students' entrepreneurial intentions. *The International Journal of Management Education, 20*(1), 100602. <https://doi.org/10.1016/j.ijme.2021.100602>
- Oben, J. A., & van Rooyen, A. (2023). Social cognitive career theory and rural high school learners' intentions to pursue an accounting career. *Accounting Education,*

- 32(4), 445–478.  
<https://doi.org/10.1080/09639284.2023.2191647>
- Osorio Tinoco, F., Bayon, M. C., & Murillo Vargas, G. (2022). Entrepreneurial career choice intentions among secondary students in Colombia: The role of entrepreneurial exposure. *International Journal of Emerging Markets*, 17(1), 277–298. <https://doi.org/10.1108/IJOEM-06-2020-0700>
- Ozyazici, G., Wang, Q., Tillotson, J. W., Milner, A., & Wang, L. (2025). Promoting entrepreneurial career development in STEM: Developing and validating a STEM entrepreneurial career development measure (SECDM). *Journal of Science Education and Technology*. <https://doi.org/10.1007/s10956-025-10251-y>
- Pham, L. X., Phan, L. T., Le, A. N. H., & Bui Ngoc Tuan, A. (2024). Factors affecting social entrepreneurial intention: An application of social cognitive career theory. *Entrepreneurship Research Journal*, 14(2), 515–543. <https://doi.org/10.1515/erj-2022-0212>
- Ratten, V. (2020). Coronavirus (COVID-19) and entrepreneurship: Changing life and work landscape. *Journal of Small Business & Entrepreneurship*, 32(5), 503–516. <https://doi.org/10.1080/08276331.2020.1790167>
- Rezky, M. I., & Lilis. (2025). Exploring the path to social entrepreneurship: How prior experience shapes student intentions through outcome expectations. *Review of Integrative Business and Economics Research*, 14(1), 45–60. <https://doi.org/10.5281/zenodo.12784562>
- Rong, Z., & Ma, J. (2024). The integration of production and education in selected universities in Shandong Province, China: An enterprise education curriculum development study. *Journal of Education and Humanities Research*, 6(2), 55–67. <https://doi.org/10.5281/zenodo.12784562>
- Tocalo, J. L. (2024). The influence of entrepreneurship education and motivation to entrepreneurial intention of young professionals in Cotabato Province. *Psychology and Education: A Multidisciplinary Journal*, 26(4), 362–373. <https://doi.org/10.5281/zenodo.13907482>
- Wang, B. (2022). Exploration of the path of innovation and entrepreneurship education for college students from the perspective of mental health education. *Journal of Healthcare Engineering*, 2022, 2659160. <https://doi.org/10.1155/2022/2659160>
- Wang, X., You, X., Wang, H., Zhang, Y., & Jiang, N. (2023). The effect of entrepreneurship education on entrepreneurial intention: Mediation of entrepreneurial self-efficacy and moderating model of psychological capital. *Sustainability*, 15(3), 2562. <https://doi.org/10.3390/su15032562>
- Ye, Z., & Kang, K. (2025). The impact of entrepreneurial self-efficacy and entrepreneurship on entrepreneurial intention: Entrepreneurial attitude as a mediator and entrepreneurship education having a moderate effect. *Sustainability*, 17(10), 4733. <https://doi.org/10.3390/su17104733>