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Integrative Entrepreneurship Learning Design: A Study on Islamic Higher Education Institutions in Indonesia

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ABSTRACT

Objective: This research aims to explore entrepreneurship courses' challenges and competency needs at Islamic Higher Education Institutions (IHEI) and develop a compatible learning design for these courses. **Method:** Using a qualitative approach, data was collected through interviews with entrepreneurship lecturers to identify challenges and department heads to understand supporting policies and curriculum development. Additionally, Semester Learning Plans (RPS) content analysis was conducted to examine course content, competencies, and teaching methods. **Results:** The findings revealed inconsistencies in the entrepreneurship course designs across IHEI. Most courses focus on providing entrepreneurial insights and shifting students' mindsets, with limited practical experiences like essential product sales. Non-classroom entrepreneurship activities vary significantly depending on the lecturers' initiative and departmental coordination. Some departments did not prioritize these activities due to unclear guidance. **Novelty:** The novelty of this research lies in its proposed integrative learning design, which emphasizes knowledge internalization, skill-building, and attitude formation. The design includes four stages: mindset-building, business experience, start-up business, and business development, offering a structured approach to enhance entrepreneurial competencies in IHEI.

INTRODUCTION

The role of higher education institutions is significantly correlated with a country's economic and social development. Universities are responsible for assisting governments in enhancing economic and social growth through entrepreneurship education. Such education is expected to stimulate the development of students' entrepreneurial skills and character (Boldureanu et al., 2020). Islamic higher education institutions (IHEI) play a crucial role in producing graduates equipped with Islamic competence and character, enabling them to thrive in the era of Industry 4.0 and rapid technological advancement (Bauman et al., 2021; Shahzad et al., 2021; Bazkiaei et al., 2020; Ghafar et al., 2020).

In this context, IHEI encourages students to learn, promotes actionable skills, facilitates coexistence, and prepares students for life beyond academia. They must cultivate graduates who are job seekers and resilient job creators. Building an Islamic entrepreneurial character is vital for addressing the significant issue There is an increasing rate of educated unemployment in Indonesia (Badawi et al., 2024; Machmud et al., 2020). The increasing rates of both open and disguised educated unemployment can be attributed to the massification of higher education, changes in

the socio-economic structure, and rapid technological advancement after the qualifications and requirements of the labor market. Research identified a gap between the education system and labor market needs in Indonesia, indicating that graduates often need more competencies than employers demand (Ali et al., 2020; Jaedun et al., 2020).

Within the IHEI curriculum, entrepreneurship is a mandatory course for all students at the institute level. The primary objective of this course is to cultivate entrepreneurial competence and mindset alongside essential traits such as self-confidence, motivation, resilience, diligence, creativity, innovation, and risk-taking. Entrepreneurship education is the process of providing concepts and skills for students to identify overlooked opportunities and to develop the knowledge and self-esteem necessary to act decisively (Sitaridis et al., 2024; Turgumbayeva et al., 2023; Malekipour et al., 2020). Emphasizes that entrepreneurship courses foster entrepreneurship by enhancing students' mindsets, behaviors, and skills, inspiring business ideas, and facilitating venture initiation and growth through innovation.

The entrepreneurship curriculum encompasses content, methods, and activities designed to enhance motivation, competence, and experience, enabling participants to apply, manage, and engage in value-added. This curriculum is intended to develop the knowledge, mindset, attitude, motivation, skills, and entrepreneurial experience necessary for individuals to discover business ideas, seize opportunities, and create value for themselves and others (Aboobaker et al., 2023; Igwe et al., 2022; Zhang et al., 2020). The entrepreneurial spirit can be cultivated through four stages of learning: inspiring students and instilling a mindset, training them to recognize business opportunities, fostering creativity, and enhancing their business networks. Factors such as a positive attitude toward entrepreneurship, embracing it as a lifestyle, promoting success through social media, and recognizing opportunities significantly influence the development of entrepreneurship in higher education.

Various teaching methods can be applied to entrepreneurship education. Active In-Depth Learning, developed by Linda and Hammond, emphasizes deep engagement with subjects through critical thinking and real-life applications, leading to better retention and cognitive development. CEFE (Competency-Based Enterprise) is another method designed to stimulate entrepreneurial performance through experiential learning (Sukmana et al., 2022; Akhyadi et al., 2021; Fischer et al., 2021; Widoatmodjo et al., 2021). Lastly, cooperative or partnership learning, such as internships, bridges the gap between theoretical knowledge and real-world business experience, which is essential for developing practical skills.

Recent studies have explored entrepreneurship education in Indonesia's IHEI. Research indicates that entrepreneurship education enhances students' entrepreneurial mindset and skills, indirectly affecting their entrepreneurial readiness (Cahyani et al., 2022). A model for Islamic entrepreneurship education (IEE) has been designed, integrating the threefold missions of higher education and incorporating inter-curricular, co-curricular, and extra-curricular activities (Jamil et al., 2023; Lailatussaadah et al., 2023). Some institutions, like the University of Nahdlatul Ulama Surabaya, have developed innovative approaches, implementing Islamic self-identity entrepreneurship learning oriented towards aliyah economics and Islamic economic principles (Cahyani et al., 2022). These studies highlight the importance of integrating entrepreneurship education into Islamic higher education curricula to enhance graduate competitiveness and promote economic development in Muslim communities. The COVID-19 pandemic

has necessitated adaptations in learning design, with blended learning emerging as an effective alternative for entrepreneurship education (Adira et al., 2025; Petrolo et al., 2023; Megahed et al., 2022; Hargitai et al., 2023; Syafidah et al., 2021). Despite progress, entrepreneurship education in Indonesia remains concentrated in Java Island and faces internal and external challenges (Amalia & von Korflesch, 2021; Aswan et al., 2020). Recommendations for improvement include addressing these challenges and implementing more contemporary teaching methods to enhance the development of entrepreneurship education across the country (Mei et al., 2022; Ramadani et al., 2022; Amalia et al., 2021; Secundo et al., 2021; Aswan et al., 2020; Hägg et al., 2020)

To date, literature on the specific design of entrepreneurship learning has been limited. Therefore, how an entrepreneurship learning design can be developed, particularly within the local curriculum, is essential for uncovering insights into current practices and identifying the methodological needs in the field of entrepreneurship education within IHEI (Achruh et al., 2024; Wahid et al., 2023; Albusaidi et al., 2022; Fahad et al., 2022; Muslim et al., 2022). The literature review and identified research gaps primarily address general entrepreneurship concepts without delving into the specifics of course design in higher education (Anubhav et al., 2024; Sitaridis et al., 2024; Rosienkiewicz et al., 2024; Aithal et al., 2023; Ghafar et al., 2020). Consequently, this study aims to develop a comprehensive learning model for entrepreneurship courses tailored to the needs of IHEI. Unlike existing literature, which broadly addresses entrepreneurship education, this research provides an in-depth exploration of curriculum design tailored to foster Islamic entrepreneurial values (Al-Fattal et al., 2024; Hussin et al., 2024; Khalil et al., 2024; Moya et al., 2024; Shofiyyah et al., 2023; Shaikh et al., 2022; Al-Shabibi et al., 2020). By incorporating recent insights on sustainability, digital transformation, and experiential learning, this study aims to bridge the gap between general entrepreneurship education principles and the unique needs of PTKIN, thereby contributing a specialized model for entrepreneurship education in Islamic institutions.

RESEARCH METHOD

This research employs a research and development approach with techniques including observation and in-depth interviews. The data used in this study consists of primary data from questionnaire responses and information gathered from interviews conducted during focused group discussions, as well as secondary data acquired through observations of the semester learning plan (SLP) documents representing the curriculum. The goal is to develop an ideal learning design for the entrepreneurship course at IHEI (Musolin et al., 2024; Huda et al., 2023; Haris et al., 2022; Ahmed et al., 2021; Leonard et al., 2021).

The development of the learning design in this study follows the Four-D model. The first step in the Four-D model is the define stage, which involves establishing and defining the requirements for learning (Erdisna et al., 2022; Sofirudin et al., 2022; Arapu et al., 2021; Maula et al., 2021; Yunus et al., 2021). This stage includes five key steps: front-end analysis, learner analysis, task analysis, concept analysis, and specifying instructional objectives (De-Oliveira et al., 2024; Aziz et al., 2023). The second step, the design stage, involves developing the format for the entrepreneurship learning design, which includes four aspects: formulating standards for assessments, selecting media appropriate to the characteristics of the material and learning objectives, reviewing existing instructional formats, and determining which format to develop, and creating

an initial design according to the chosen format (Busyairi et al., 2023; Harahap et al., 2020).

The third step is the development stage, where hypothetical learning designs are created and undergo expert evaluation, limited trials, and extensive trials to produce a master design. This process includes two phases: expert appraisal and developmental testing (Walter et al., 2023; Koskenranta et al., 2022; Vasey et al., 2022; Luo et al., 2021; Skivington et al., 2021).

Finally, the dissemination stage is the last phase of development, aimed at promoting the developed product for acceptance by users, whether individuals, groups, or systems. Dissemination will be conducted in a forum involving practitioners of entrepreneurship education (Banha et al., 2022; Jardim et al., 2021; Ratten et al., 2021; Gabrielsson et al., 2020; Gilmore et al., 2020). This stage aims to gather feedback, corrections, suggestions, and evaluations to refine the final product for user adoption. This dissemination phase involves user analysis, determining strategies and themes, selecting timing, and choosing media (Naeem et al., 2023; Cartwright et al., 2021; Boon-Itt et al., 2020; Mezmir et al., 2020; Skovlund et al., 2020). According to Gilmore et al. (2020), the effectiveness criteria for dissemination include clarity, validity, pervasiveness, impact, timeliness, and practicality.

The population and sample for this research consist of learning design data from three higher education institutions in Indonesia: IAIN Salatiga, UIN Sunan Kalijaga, and Universitas Ibnu Khaldun. Needs and content analysis were conducted at the initial stages of the research through interviews and observations of the SLP review. Subsequently, the prototype testing of the entrepreneurship course learning design was carried out by distributing questionnaires regarding interest.

RESULTS AND DISCUSSION

Results

Based on the research's question of how an entrepreneurship learning design can be developed for IHEI, a Focused Group Discussion (FGD) was initiated involving lecturers teaching entrepreneurship courses from three IHEI. From the FGD, it can be mapped that the design and strategies for entrepreneurship learning thus far are as follows:

Table 1. Results of the content analysis of the semester learning plan (SLP) for the entrepreneurship course at two they.

No.	Description
1.	It only emphasizes or focuses on providing insights and changing students' mindsets toward entrepreneurship.
2.	It equips students with entrepreneurial skills and practices, even if it is just selling products.
3.	Non-academic entrepreneurship activities at IAIN Salatiga are conducted from the program study to the institutional level.
4.	At the program study level, non-academic entrepreneurship activities heavily depend on the willingness of entrepreneurship lecturers and coordination with the program study.
5.	Not all programs offer supporting activities for the entrepreneurship course, even though they include it in their curriculum. This is due to the need for clear direction regarding entrepreneurship activities.

6. Some programs believe that supporting activities for entrepreneurship should be revised.

Table 1 shows that most of the design orientation for the entrepreneurship course at IHEI is still traditional, tutorial-based, and emphasizes only cognitive aspects. The percentage of affective and psychomotor competencies is still meager.

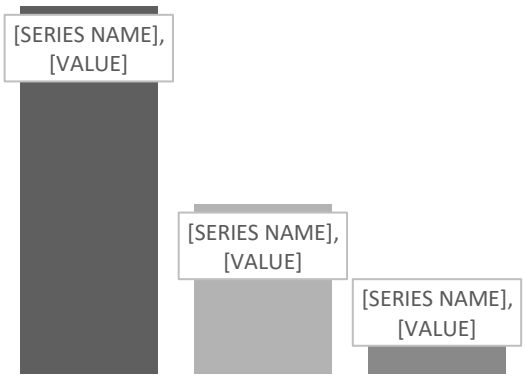

Figure 1. Competence composition before integrative learning design.

The figure above asserts the result of content analysis on SLP, which emphasizes cognitive competence up to 65%, followed by affective competence at 30%, and the lowest aspect of psychomotor competence at 5%.

Discussion

To address the central research question of how an integrative entrepreneurship learning design can be developed, our finding reveals that integrating the entrepreneurial spirit within higher education requires a curriculum that aligns with national standards and each institution's unique values and local wisdom. Fostering the entrepreneurial spirit in higher education can be carried out and tailored to the local wisdom of each institution (Al-Fattal et al., 2024; Hussin et al., 2024). In IHEI, there is a variation in the number of SKS (credit units) for the entrepreneurship course, which ranges from 2 to 3 SKS. The vision and mission of the higher education institution can serve as a reference in forming the curriculum and determining whether the entrepreneurship course is a core subject or just a one-semester offering. Among the three IHEI institutions sampled, all made the entrepreneurship course a mandatory subject with 2-3 SKS. Thus, the entrepreneurship learning curriculum design with 2-3 SKS must be carefully structured to foster students' spirit, motivation, creativity, and entrepreneurial character. The syllabus, semester learning plan (SLP), theoretical modules, practical modules, and field practice must all be comprehensively included in the curriculum (Walter et al., 2023; Koskenranta et al., 2022). In formulating the curriculum, practitioners or business actors and motivators should be involved in producing concepts and entrepreneurial ideas suitable for students from various disciplines (Vasey et al., 2022; Luo et al., 2021; Skivington et al., 2021).

According to Bloom's taxonomy, which consists of three domains: 1) cognitive for knowledge mastery; 2) affective for attitude development; and 3) psychomotor for physical skills development, all three domains should be incorporated into the design of the entrepreneurship course at IHEI (Khalil et al., 2024; Moya et al., 2024; Shofiyyah et al., 2023; Shaikh et al., 2022; Al-Shabibi et al., 2020).

To realize the competencies and entrepreneurial character in students, a lecturer is required to 1) provide a new paradigm of entrepreneurship; 2) change the students' mindset or at least guide them toward an entrepreneurial spirit; 3) inspire and motivate students to become independent human resources; 4) provide examples of work and present success stories; and 5) produce human resources or alums who become successful entrepreneurs. Below is the design of the entrepreneurship course learning:

Table 2. Results of the content analysis of the semester learning plan (SLP) for the entrepreneurship course at two IHEI.

Domain	Domain Goals	Activities	Description	Learning Strategy	Face-to-face Percentage	Assessment	Course Competencies
Cognitive	To produce knowledge's mastery	Learning about theory, concept, and case study	• Lecturers must be able to provide a new paradigm of entrepreneurship; • Lecturers must be able to change the mindset of students or at least guide them towards having an entrepreneurial spirit.	Student-Centered Learning (SCL)	20%	• Written test • Essay about entrepreneurship	Students possess insight, mindset, attitude, motivation, knowledge, skills, and entrepreneurship experience, enabling them to generate ideas, seize opportunities, start a business, and develop it to provide added value for themselves and others.
Affective	To produce students's attitude	Students learn to solve the case studies based on theories and concepts they have learned before	• Lecturers must be able to change students' mindsets or at least direct students to have an entrepreneurial spirit. • Lecturers must be able to provide inspiration and motivation for students to become independent human resources • Lecturers must be able to provide examples of work and present success stories		30%	• Entrepreneurship questionnaire • Essay about business passion	
Psychomotor	To provide physical skill	Students are given assignments and opportunities to practice doing business directly, selling, producing, and making feasible business plans.	• Lecturers must be able to provide examples of work and present success stories • Lecturers must be able to produce human resources or alums to become successful entrepreneurs.		50%	• Field practice • Production and sales practice • Crea	

Table 2 explains that to develop cognitive competencies, students must be equipped with entrepreneurial knowledge and skills that need to be created, nurtured, and

developed so that they possess sufficient knowledge to generate business ideas, assess business feasibility, run a business, and grow their ventures. For example, the work highlights the importance of entrepreneurial education in nurturing skills for idea generation and business management. Additionally, it discusses how cognitive competencies can enhance students' ability to evaluate business opportunities. Therefore, generating business ideas and assessing feasibility can be categorized as essential entrepreneurial competencies; running a new business can be considered an intermediate entrepreneurial competency; and expanding a business represents an advanced entrepreneurial competency.

Furthermore, developing entrepreneurial awareness, mindset, attitudes, and motivation falls under the affective domain of entrepreneurship competence. This domain must be cultivated and developed so that students have the mindset, courage, and determination to become job creators rather than job seekers. Mezmir et al. (2020) discuss the importance of fostering entrepreneurial mindsets and attitudes in students. They emphasize the affective domain in entrepreneurship education and note that motivation and self-efficacy are critical to entrepreneurial success.

Psychomotor competencies, on the other hand, can be developed through entrepreneurial experiences, that is, actual actions or practical applications of entrepreneurial knowledge and skills. This can be done through internships, production and sales, or direct business practices. Practical applications and real-world experiences are vital for developing psychomotor skills. The role of internships and hands-on experiences in fostering entrepreneurship competencies is discussed, who proposes that experiential learning enhances students' ability to apply their knowledge effectively.

States that student-centered learning (SCL) involves a shift in power within the learning process—from the lecturer as the expert to the student as the learner. Further suggests that SCL represents one pole of the learning process, emphasizing the student as the agent who constructs knowledge. In contrast, the other pole views the lecturer as the knowledge provider. SCL focuses on what students do to succeed in their learning, positioning students as active learners. Therefore, the most appropriate strategy for entrepreneurship courses is student-centered learning (SCL). In this approach, students are expected to play an active and independent role in the learning process, taking responsibility and initiative to identify their learning needs, find sources of information to meet those needs and build and present their knowledge based on those sources. To some extent, students may choose what they want to learn, especially concerning affective and psychomotor competencies.

The advantage of implementing Student-Centered Learning is that students are actively involved in the learning process, which encourages them to gain more knowledge, exposes them to real-life situations, fosters active learning, helps them recognize and use various learning styles, considers students' needs and backgrounds, and provides opportunities for developing a variety of assessment strategies.

Student-centered learning (SCL) characteristics are that lecturers act as facilitators and motivators, guiding students in their learning journey. Students must demonstrate creative performance integrating cognitive, psychomotor, and affective abilities. The learning process emphasizes inquiry and discovery methods, fostering critical thinking and engagement among students (Adira et al., 2025). Furthermore, learning resources can come from various sources, enhancing student engagement and facilitating more profound understanding. Finally, the learning environment should be well-designed and contextual, as this design is crucial in promoting meaningful learning experiences.

This comprehensive approach to SCL aligns with preparing students effectively for real-world challenges, ensuring they are knowledgeable and equipped with the skills and attitudes necessary to thrive in their future careers (Petrolo et al., 2023).

In student-centered learning (SCL), the lecturer's role is to act as a learning facilitator who understands the learning outcomes students need to master. They design strategies and learning environments that provide diverse learning experiences. They help students access, organize, and process information to solve real-world problems and identify relevant assessment patterns aligned with the expected learning outcomes (Megahed et al., 2022). Meanwhile, students are responsible for understanding the course's learning outcomes, mastering the learning strategies offered by the lecturer, agreeing on the proposed learning plan, and engaging in active learning. This active learning involves various methods such as listening, reading, writing, discussion, problem-solving, and higher-order thinking activities like analysis, synthesis, and evaluation, individually and in groups.

In applying SCL, lecturers must select appropriate teaching methods and strategies. They may even develop their teaching methods, provided these adhere to SCL principles. Effective learning methods include small group discussions, role-playing, simulations, case studies, discovery learning (DL), self-directed learning (SDL), cooperative learning (CL), collaborative learning (CbL), contextual instruction (CI), project-based learning (PjBL), and problem-based learning (PBL) (Hargitai et al., 2023; Syafidah et al., 2021). The composition of the learning content for each domain of competence is as follows:

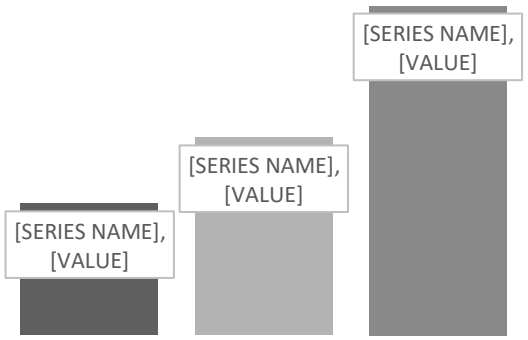

Figure 2. Competence composition after integrative learning design.

CONCLUSION

Fundamental Finding: This study emphasizes the role of higher education institutions in entrepreneurship education, highlighting their responsibilities as facilitators of entrepreneurial culture, mediators of skills development, and drivers of regional business growth. The fundamental finding reveals that higher education institutions must impart knowledge and cultivate a mindset conducive to entrepreneurship among students. Instructors play a critical role in this process, as they are expected to present new paradigms, shift students' mindsets, inspire independence, provide tangible examples and success stories, and produce successful intrapreneurs and entrepreneurs.

Implication: The implications of these findings suggest a need for universities to design integrated entrepreneurship curricula using student-centered learning (SCL) strategies, which address cognitive, affective, and psychomotor competencies. Establishing entrepreneurship centers is essential for managing entrepreneurial

activities, fostering collaboration with external stakeholders, and providing practical experiences. Additionally, strengthening ties with the business sector is crucial for enhancing the quality of both students and faculty while offering opportunities for real-world engagement. **Limitation:** However, the study needs to be expanded in scope, focusing on only three Indonesian institutions, which may restrict the generalizability of the findings. The typical short duration of entrepreneurship courses (2-3 credit hours) may also hinder the development of a comprehensive entrepreneurial mindset and requisite skills. Future research should explore the implementation of similar programs across a broader range of higher education institutions, both nationally and internationally, to assess the applicability and effectiveness of the "5 M" framework and SCL strategies. Investigating the long-term impact of Entrepreneurship Centers on student success and the local economy would provide valuable insights, as would tracking the success of graduates from entrepreneurship programs to evaluate the translation of these initiatives into real-world ventures. **Future Research:** Lastly, future studies could examine diverse pedagogical methods that complement or enhance the SCL framework, particularly those fostering creativity, innovation, and resilience in entrepreneurship students.

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