

‘The Port and ACE Module’ as a Catalyst for Teaching and Learning Innovation in Higher Education

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Abstract: *This paper explores how an entrepreneurship incubator “The Port”, and Accelerated Entrepreneurship Development Program (ACE) module can serve as a platform for innovative teaching and learning in higher education. Moving beyond traditional classroom methods, this study examines how incubator-based experiential learning fosters student engagement, critical thinking, real-world problem-solving, and interdisciplinary collaboration. Through case studies, interviews, and student feedback, the paper investigates the impact of integrating incubator activities into academic curricula and how such integration reshapes the role of instructors from content deliverers to facilitators and mentors. The findings aim to offer a model for educational institutions seeking to enhance learning through entrepreneurship and innovation environments.*

Keywords: Teaching and Learning Innovation; Incubator-Based Learning The Port; Experiential Learning; Higher Education; Accelerated Entrepreneurship Development Program (ACE)

1. Introduction

These days, the media has highlighted those recent graduates in Malaysia lack certain soft skills. In a report published on *DagangNews.com*, a website that highlights recent and breaking news, The Group Editor-in-Chief and Executive Director of The Star Media Group, noted that today’s graduates often lack essential skills such as communication, innovation, and leadership (Wong, 2024). It is vital to recognise that holistic graduates are needed to meet the demands of an increasingly complex industry and society. Today’s industries are not only seeking individuals who are skilled in specific fields but also those who can adapt to change, think critically, and solve problems creatively (Abdul Roni, 2024). Thus, the rapid pace of current developments requires a timely and strategic response from all educational institutions. Curricula must be continuously updated to remain relevant to evolving societal and industry needs. Graduates must be equipped with future-ready skills, whether they pursue academic pathways, alternative routes, or Technical and Vocational Education and Training (TVET) programs (Berita RTM, 2025). Therefore, innovations in university teaching and learning are vital towards supporting universities to prepare students for their future careers, equipping them with the skills and experiences needed for them to be successful.

1.1 The Port: A Holistic Entrepreneurship Incubator at UiTM Johor Branch

To produce holistic and competitive graduates, The Port an entrepreneurship incubator was established at Universiti Teknologi MARA (UiTM) Johor Branch, Segamat Campus. This initiative provides a platform for students to operate real businesses within the campus environment, transforming classroom theory into practical experience. More than just a business space, The Port serves as an innovative approach to experiential learning, embedded within a unique and holistic entrepreneurship education module known as the ACE (Accelerated Entrepreneurship Development Program). The ACE module was developed by integrating curriculum and teaching experiences from key subjects such as ENT300, ENT530 (Fundamentals of Entrepreneurship), MGT162 (Fundamentals of Management) and many more take covers marketing and operations management (Majid et al., 2025). At The Port where theory meets reality as the students are no longer just learning about business concepts in the classroom, but are actively managing real operations, including marketing, finance, customer service, and daily business activities. Meanwhile, the ACE module is specifically designed to guide students systematically from idea generation, business planning, and implementation, all the way to performance evaluation (Majid et. al., 2025). Entering its third year of operation since 2022, officially launched on 4th January 2023 by the Assistant Vice Chancellor of Entrepreneurship (MASMED), UiTM (UiTMCJ Official Facebook, 2023).

The Port has trained over 15 student groups in running businesses ranging from food and beverages to phone accessories (Jawatankuasa The Port, 2025). Beyond serving as a training platform, The Port has also proven to generate income for students and has become a catalyst for a growing and vibrant entrepreneurial ecosystem on campus.



Figure 1: The Port at UiTM Johor Branch (Source: Jawatankuasa The Port, 2024)

2. Literature Review

This section discusses the teaching & learning innovation and the entrepreneurship education.

2.1 Teaching and Learning Innovation

In general, innovation involves making changes or trying new approaches, driven by creativity and adaptability. In the context of education, innovation is not tied to a single definition or formula. Instead, it reflects a mindset of openness a willingness to challenge the status quo, rethink traditional methods, and explore different ways to engage learners, deliver content, and measure success (Thompson, 2024). One of the examples of innovation in teaching and learning can be Project-Based Learning (PBL), this approach helps students identify a real-

world problem and develop a solution for it. Hence, students can exercise their creative thinking, problem-solving, and collaboration with other students, The Port is one good example of the PBL approach.

2.2 Entrepreneurship Education and Incubators

Entrepreneurship education has grown in importance as institutions aim to develop student capabilities in creativity, opportunity recognition, and problem-solving. Incubators such as The Port offer students' access to mentors, funding, and networking, which are powerful learning tools when embedded into academic programs. Research conducted by Kameas et al. (2024) known as Learn.Inc transforms postgraduate education in Southeast Europe through challenge-based learning, digital innovation, and community engagement. A key output, the Project-based teaching incubator, showcases top student projects developed, and co-designed with faculty to align the new digital courses with EU priorities: Green, Inclusive, Fit for Digital, Transparent. In addition, another research by Jones et al. (2021) stated that traditional graduate careers declining and the Covid-19 pandemic worsening job prospects, entrepreneurship offers a viable alternative. Hence, university-based incubators provide low-risk settings for students to develop business ideas.

3. The Role of Learning Modules

Integrated learning design allows educators to support skills through structured experiences, when aligned with real-world contexts, program like The Port and modules like the ACE can translate concepts into desired skills and promoting deeper learning.

3.1 The research objectives of this study are as follows:

- i. To investigate how “The Port” supports teaching & learning via innovative teaching approach.
- ii. To explore how students' entrepreneurial engagement at “The Port” enhances their learning outcomes.
- iii. To propose a model that integrate entrepreneurial incubator into classroom settings through teaching and learning innovation.

3.2 The ACE Module: Concept and Structure

The ACE Module was developed as a strategic educational initiative aimed at introducing students to entrepreneurship. The module was officially developed in November 2020, the module includes two key resources, a facilitator guidebook and a simulation book. The module-ACE was designed to support students by offering early-stage guidance and structured exposure to entrepreneurship practices (Modul ACE, 2021).

3.2.1 The Overview of Accelerated Entrepreneurship Development Programme (ACE) Module

The development of the ACE module reflects the writers' commitment in producing students who are not only knowledgeable but also capable of thriving in entrepreneurial environments. It aligns with several national initiatives, including the National Entrepreneurship Policy 2030 (DKN 2030) and the Entrepreneurship Action Plan for Higher Learning Institutions (PTK IPT 2021–2025), both of which emphasize inclusive and competitive entrepreneurial ecosystems. Beyond student development, ACE 2021 also aims to enhance the academic community by encouraging staff involvement in writing and increasing the number of entrepreneurship publications produced by the university. The program aspires to become a lasting reference

and catalyst for future entrepreneurship education efforts at UiTM and beyond, fostering a strong and sustainable entrepreneurial culture across the academic landscape.



Figure 2: Cover Page of ACE Module (Photo Courtesy of JK ACE, 2025)

3.3 Contents of Accelerated Entrepreneurship Development Programme (ACE) Module

The ACE Guidebook is a comprehensive entrepreneurship training module aimed at equipping beginner entrepreneurs, particularly students with foundational knowledge and skills across key business disciplines. The content is divided into eight core modules, each focusing on a critical aspect of business development (Module ACE, 2021). Module 1 emphasizes entrepreneurial identity and ethics, laying a moral and personal foundation for aspiring business owners. Where module 2 follows with an introduction to business planning, enabling students to craft viable startup ideas. Module 3 and Module 4 address the operational aspects of a business, covering organizational structure, human resource management, and operations management. Module 5 focuses on marketing strategies, followed by Module 6, which dives into financial management, ensuring students understand budgeting, accounting, and investment fundamentals. Module 7 builds soft skills in negotiation and business communication, vital for stakeholder engagement. The final section, Module 8, offers entrepreneurial insights and motivational quotes, inspiring learners through real-life experiences.

The guidebook also includes a list of contributing authors and references, highlighting academic credibility and collaborative development. Overall, the ACE 2021 module serves as a holistic training resource, supporting UiTM's mission to cultivate capable, ethical, and innovative entrepreneurs (Module ACE, 2021).

3.4 How the Port and ACE Module Relate to Teaching and Learning Innovation

There are several key principles that can be related to teaching and learning innovation such as outcome-based, experiential learning, interdisciplinary content and real-world relevance, 21st century skill development, student-centered and reflective learning and modular and scalable curriculum design.

3.4.1 Outcome-Based, Experiential Learning

Each ACE module is practical and outcomes-driven, encouraging students to apply knowledge in real-life entrepreneurial scenarios. This is a major shift from traditional lecture-based

instruction to learning by doing. Innovation where it moves learning from theory to practice where students build real business plans, conduct operations simulations. Through *The Port*, students can take the business plans from Module 2 in ACE Module and develop actual services.

3.4.2 Interdisciplinary Content and Real-World Relevance

The modules combine knowledge from business, communication, ethics, finance, and operations, exposing students to the complex realities of starting and running a business. Teaching and learning innovation, this encourages cross-curricular learning where students integrate various fields to solve real-world problems. Students participating at *The Port* navigate real organizational, marketing, and financial challenges, as outlined in Modules 3 to 6.

3.4.3 Skill Development

Module 7: Business Negotiation and Communication, Module 1: Entrepreneurial Identity and Ethics focus on soft skills that are essential for success in modern careers but are often underdeveloped in traditional classroom settings. Innovation: Embeds critical thinking, collaboration, adaptability, and ethical reasoning into the learning process for example students in *The Port* practice these skills when pitching to mentors, negotiating team roles, or responding to client feedback.

3.4.4 Student-Centered and Reflective Learning

The final module, *Jejak Usahawan dan Kata-Kata Hikmah* (Entrepreneurial Journey and Words of Wisdom), introduces reflective practice, encouraging students to learn from the experiences of others and from their own actions. This introduces self-reflection as a core learning strategy, aligning with constructivist theories of education. Students participating in *The Port* can reflect on failures, iterate, and improve the key principles of both entrepreneurship and deep learning.

3.4.5 Curriculum Design

Each module can stand alone or to be integrated into various programs, making ACE module flexible and adaptable to different disciplines or educational levels. This encourages personalized learning paths where non-business students like computer science or information management could select ACE modules relevant to startup development through *The Port*. The ACE 2021 module embodies teaching and learning innovation by replacing passive learning with active, experiential approaches and creating opportunities for assessment through real-world challenges when delivered in collaboration with an incubator like *The Port*, ACE module transforms the classroom into a “living lab” of entrepreneurship, making education more engaging, relevant, and impactful.

4. Results of Analysis

For the pre-session, data was collected from 15 respondents, while the post-session data was collected from 32 respondents. The data was gathered through online questionnaires (Google Forms) distributed to participants of *The Port* from 2023 to 2025. In addition, simple observations were conducted to understand the day-to-day operations and interactions within the participants of the program. These were complemented by informal interviews to gain further insights into participants’ experiences and perceptions.

4.1 Expectations of The Participants Have Before Experiencing the Port (Pre Session)

There are nine (9) questions on the expectations of the participants before experiencing the Port program.

Table 1: Expectations of The Participants Have Before Experiencing the Port (Pre Session)

	1) How confident are you that the entrepreneurship incubator at UiTM Johor will provide a valuable overall experience?	2) To what extent do you expect "The Port Incubator Program" to meet your needs as an aspiring entrepreneur?	3) How relevant do you expect the incubator program to be to your entrepreneurial goals?	4) What are your expectations regarding the support you will receive from the incubator facilitators and mentors?	5) Do you expect the resources provided (e.g., workspace) by the incubator to be sufficient for your business development?	6) Based on what you know so far, how likely are you to recommend "The Port" incubator program to other students?	7) Do you expect that joining this program will help you develop your interpersonal skills?	8) Do you expect this program will help you generate income through your business activities?	9) Do you expect that The Port will support teaching innovation by providing an environment and support systems that encourage creative thinking and problem-solving?
Average	3.38	3.54	3.46	3.31	3.54	3.31	3.46	3.54	3.62

The survey assessed participants' expectations and perceptions of The Port Program across nine key questions. The average scores, based on a 5-point Likert scale, indicate generally positive sentiments, with most participants rating between neutral and agree. This suggests that The Port Program is well-received overall particularly in terms of its innovative teaching environment, alignment with participants' goals, and the availability of resource support where average scores ranged from 3.31 to 3.54.

4.2 Expectations of the Participants Have Before Experiencing the ACE Module (Pre Session)

There are eleven (11) questions on the expectations of the participants before experiencing the ACE module.

Table 2: Expectations of the Participants Have Before Experiencing the ACE Module (Pre Session)

	10) To what extent do you expect "The ACE" module to improve your understanding of entrepreneurship?	11) How practical and applicable do you expect the content of "The ACE" module to be for your business or business idea?	12) Do you expect the module to help you develop or refine your business plan?	13) Do you expect "The ACE" module to improve your confidence in starting or running a business?	14) How well do you expect the module to help you develop entrepreneurial skills such as leadership, creativity, risk-taking, and problem-solving?	15) Do you expect the module to provide useful tools or frameworks for entrepreneurship (e.g., Business Model Canvas, Lean Startup)?	16) Do you expect to feel more prepared to launch or grow your business after completing the module?	17) Do you expect to be encouraged to reflect on your learning and entrepreneurial journey throughout the module?	18) Which specific teaching innovation(s) in The ACE module do you expect will have the most positive impact on your learning?	19) Do you expect innovative teaching approaches to be used throughout the incubator program (The Port) and The ACE module?	20) Do you expect the teaching in the ACE module and incubator (The Port) to be more innovative compared to other academic courses?
Avg .	3.31	3.23	3.31	3.46	3.46	7 answered yes and 8 answered not sure	3.69	3.46	3.46	3.31	3.62

Participants moderately expected the ACE Module to enhance entrepreneurial skills, build confidence, foster teaching innovation, and support skills development, with average ratings ranging from 3.23 to 3.69. They also anticipated that the specific teaching innovations included in the module would have a positive impact on their learning. Additionally, participants expected the teaching approach to be more innovative compared to other academic courses.

4.3 Demographic of the respondents

Umur dalam tahun / Age in years

32 responses

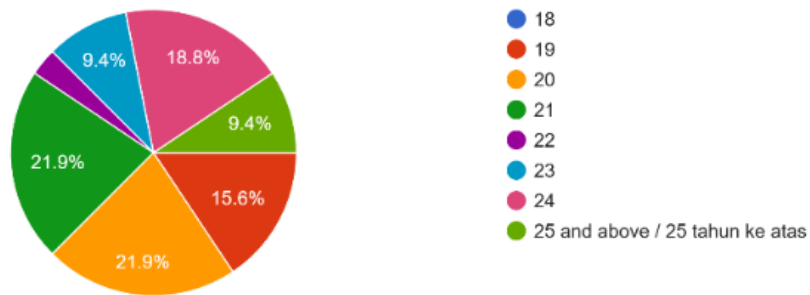


Figure 3: Age Group of the Respondents

The pie chart in figure 3 displays the age distribution of a group, with percentages for each age group where 18 years old: 9.4%, 19 years old: 15.6%, 20 years old: 21.9%, 21 years old : 21.9%: 21.9%, 22 years old: 3.1%, 23 years old: 9.4%, 24 years old: 18.8% and 25 and above: 9.4%. It can be concluded that majority are in the typical undergraduate age range (18–24 years old).

Program
32 responses

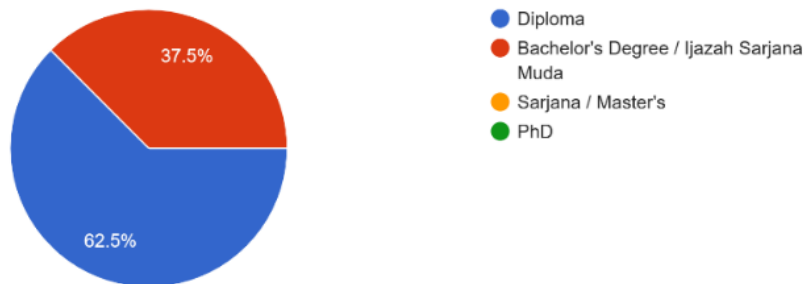


Figure 4: Respondents' Educational Levels

With reference to figure 4, most of the respondents are undergraduate students, where 37.5% are diploma students and 62.5% are bachelor's degree students. This reflects the objective of the program “The Port” to train undergraduate students to be entrepreneurs.

Tick the subjects that you have taken / Tandakan subjek yang telah anda ambil

32 responses

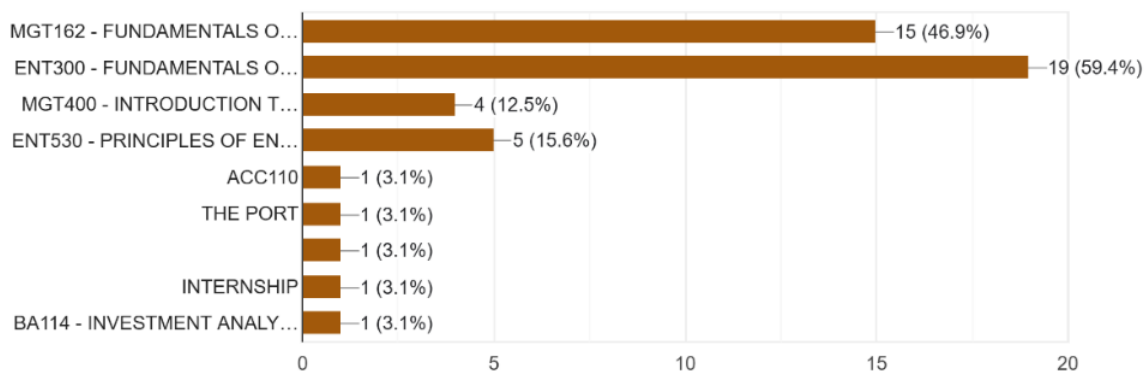


Figure 5: Subjects taken by the respondents

ENT300 (Fundamentals of Entrepreneurship) – 59.4%, MGT162 (Fundamentals of Management) – 46.9%, ENT530 (Principles of Entrepreneurship) – 15.6%, MGT400 (Introduction to Management) – 12.5%. These are the core subjects taken by the respondents depending on the level of education (diploma or bachelor's degree).

When did you join the PORT Program? / Bilakah anda menyertai Program PORT?
 32 responses

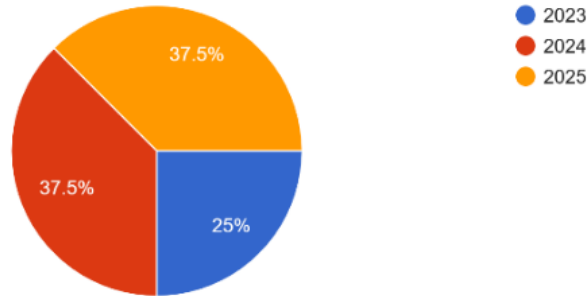


Figure 6: Year Joint the Port Program

Most of the respondents had joined the program in years 2024 and 2025.

4.4 Feedbacks on The Port Program

How did you know about the PORT Program? / Bagaimanakah anda mengetahui tentang Program PORT?
 32 responses

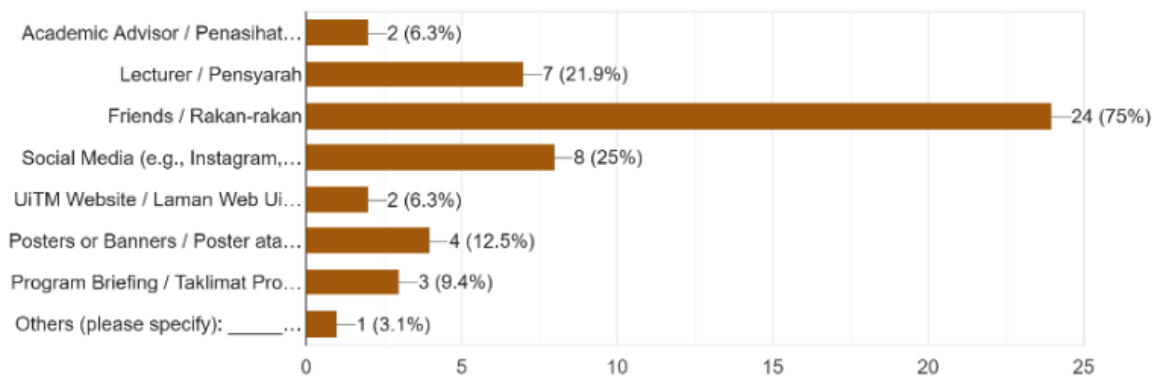


Figure 7: How participants discovered the PORT Program

The chart in figure 7 reveals how participants discovered the PORT Program, based on 32 responses. It offers valuable insights that the most effective communication channels for student engagement. Peer influence is dominant (75%), most students heard about the program through friends. This indicates the power of word-of-mouth and informal peer networks in promoting initiatives. Digital channels matter, (25%) social media is the second most effective medium where platforms like Instagram, WhatsApp, or TikTok likely play a role in reaching students efficiently.

1) How satisfied are you with your overall experience in the entrepreneurship incubator at UiTM Johor? Sejahter mana anda berpuas hati dengan p... program inkubator keusahawanan di UiTM Johor?
 32 responses

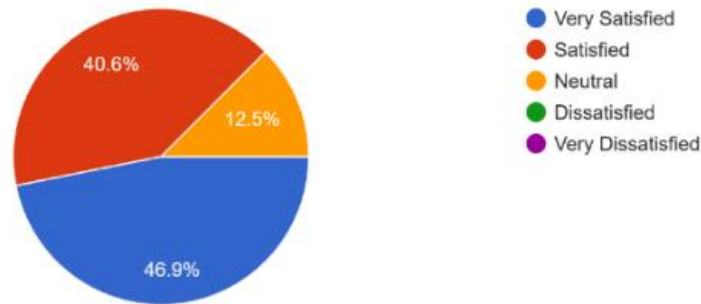


Figure 8: Overall experience

Based on figure 8, most of the respondents (87.5%) are either satisfied or very satisfied with their overall The Port experience, indicating strong positive feedback. No dissatisfaction reported this reflects on the program's effectiveness. 12.5% remains neutral, this suggests room for improvement or that some experiences may have been average.

2) To what extent did the "The Port Incubator Program" meet your expectations? Sejahter mana program The Port ini memenuhi jangkaan anda?
 32 responses

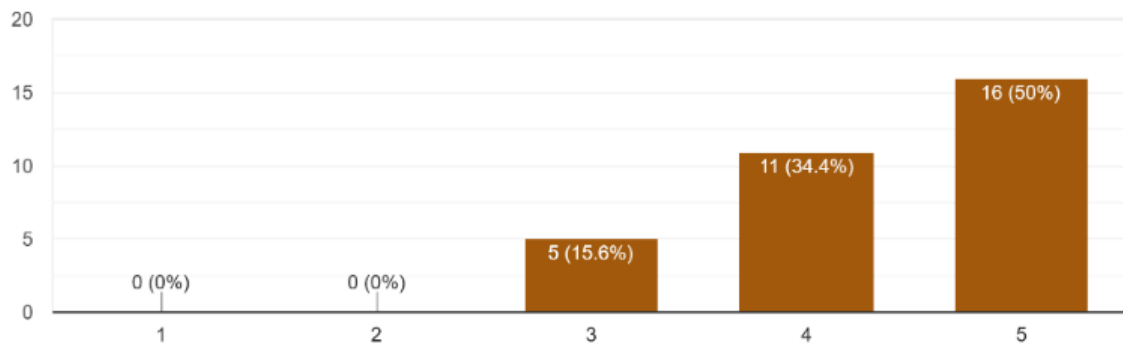


Figure 9: Expectations

50% of the respondents feel the program exceeded their expectations, it shows a strong level of satisfaction. 34.4% felt the program met their expectations, indicating a majority are positively aligned with what the program promised. 15.6% were neutral, suggesting some participants were neither fully satisfied nor disappointed. To sum, no one reported the program failing to meet expectations (ratings 1 or 2).

3) How relevant was the incubator program to your entrepreneurial goals? Sejahter mana program ini berkaitan dengan matlamat keusahawanan anda?

32 responses

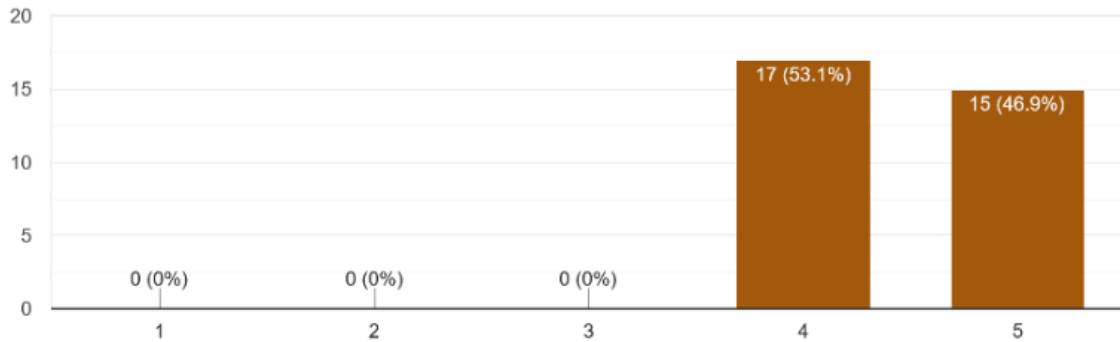


Figure 10: The Relevancy

As shown in figure 10 all respondents (100%) agreed that The Port is relevant towards their entrepreneurial goals.

4) How would you rate the support provided by the incubator facilitators and mentors? Bagaimanakah anda menilai sokongan yan...iberikan oleh fasilitator dan mentor inkubator?

32 responses

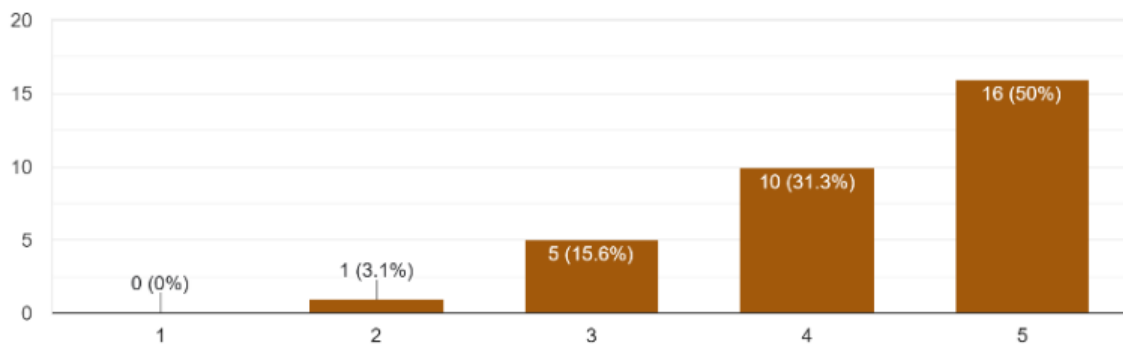


Figure 11: Support provided by the facilitators and mentors

Based on Figure 11, the majority 81.3% rated the support as good or excellent (4 and 5 ratings). Only 3.1% felt the support was below average, and no respondents rated it as poor. A small percentage (15.6%) felt the support was average. The facilitators and mentors are generally perceived as highly supportive, which is critical for the success of entrepreneurship. However, there is a small opportunity to understand and address the needs of those who rated the support as average or below average. Thus, maintaining or increasing personalized mentor support could help improve satisfaction further.

5) Were the resources (workspace) provided by the incubator sufficient for your business development? Adakah sumber yang disediakan (...) mencukupi untuk pembangunan perniagaan anda?
 32 responses

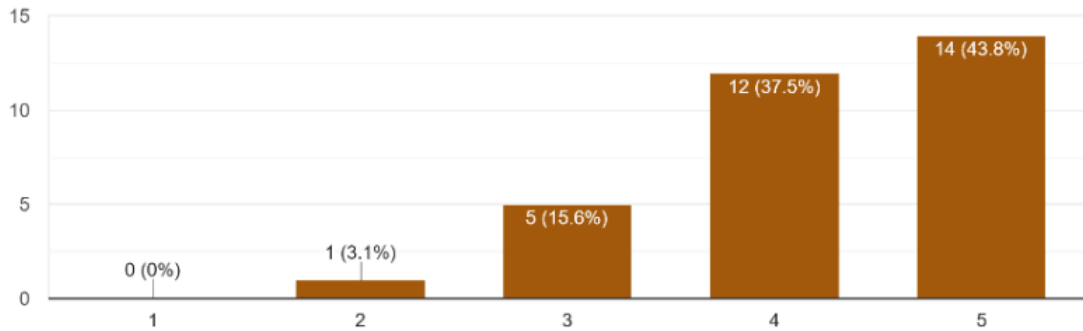


Figure 12: Sufficiency of Resources

Majority, 81.3% rated the workspace resources as sufficient or very sufficient (4 and 5). Only a very small number (3.1%) felt the resources were somewhat insufficient. 15.6% gave a neutral rating, which suggests that some respondents feel the resources are average or could be improved.

6) How likely are you to recommend this incubator program (The Port) to other students? Sejahter mana kemungkinan anda akan mencadangkan program (The Port) ini kepada pelajar lain?
 32 responses

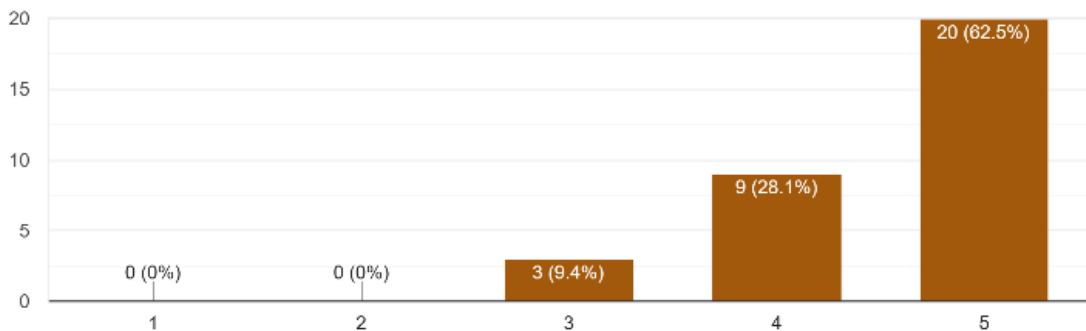


Figure 13: Recommend to others

As shown in figure 13, high recommendation with a significant majority 90.6% are likely or very likely to recommend the program to others.

7) Do you think joining this program helps with developing your interpersonal skills? Adakah anda fikir menyertai program ini membantu dalam pembangunan kemahiran interpersonal anda?
 32 responses

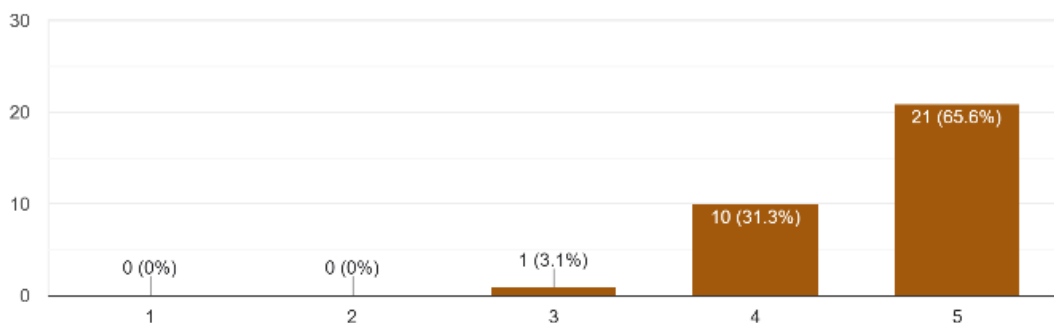


Figure 14: Perceptions towards developing skills

96.9% of respondents agree or strongly agree that the program helps develop their interpersonal skills.

8) Do you think this program helps towards generating income? Adakah anda fikir program ini membantu dalam menjana pendapatan?

32 responses

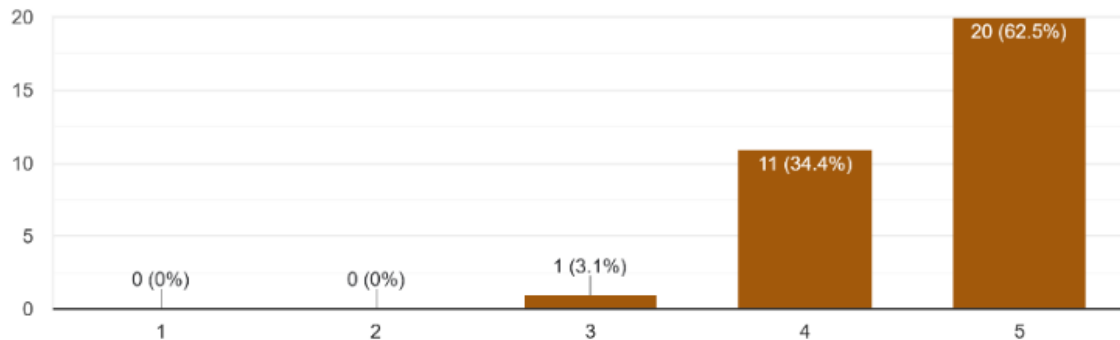


Figure 15: Income generation

With reference to figure 15, 96.9% of respondents agree or strongly agree that the program helps them to generate income.

9) The Port is aligned with teaching innovation, because it provides the environment and support systems that encourage creative thinking and prob...kkan pemikiran kreatif dan penyelesaian masalah.

32 responses

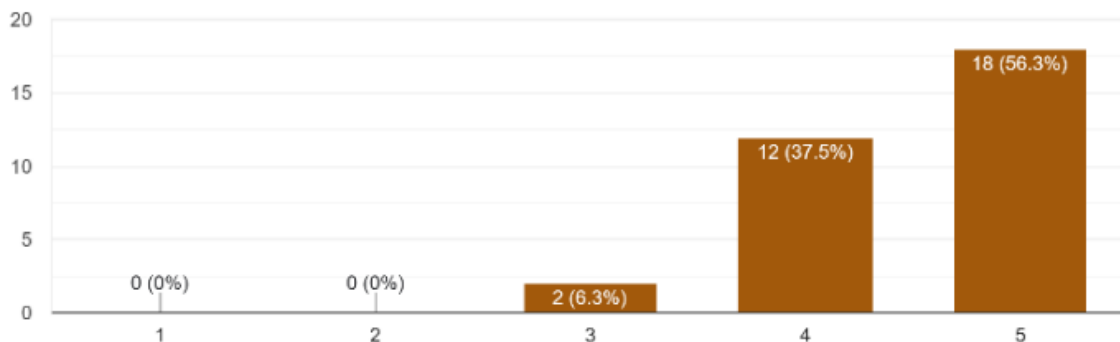


Figure 16: Perceptions towards Teaching and Learning Innovation

As shown in figure 16, majority with 93.8% of respondents agree or strongly agree that the program supports innovation through its environment and support systems. Neutral: 6.3% remain neutral. It can be suggested that The Port is well-recognized for fostering a culture of innovation especially in teaching and learning. In addition, it effectively provides the environment and tools for creative thinking and problem-solving. This highlights The Port's role in nurturing innovative mindsets crucial for entrepreneurship and business success.

4.5 Feedbacks on The ACE Module

10) To what extent did "The ACE" module improve your understanding of entrepreneurship? Se jauh mana modul ini membantu meningkatkan pemahaman anda tentang keusahawanan?

32 responses

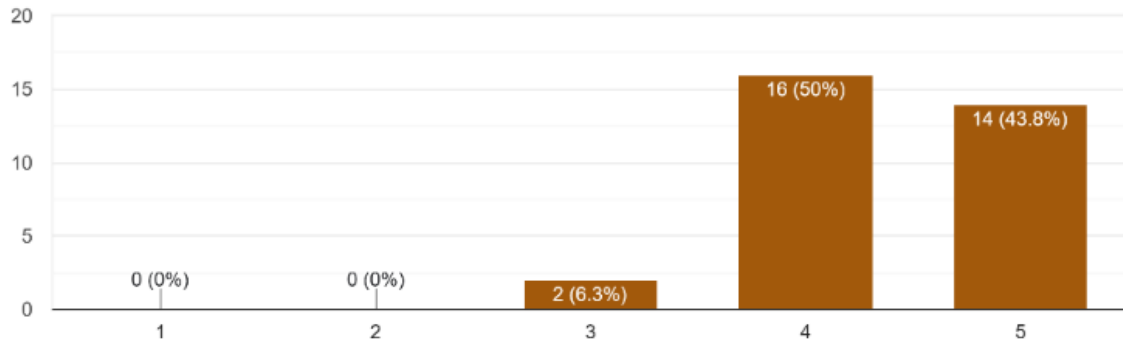


Figure 17: The ACE Module improve understanding of entrepreneurship

Figure 17 shows that the majority, 93.8% of respondents reported that the module improved their understanding of entrepreneurship (rating 4 or 5). Only 6.3% rated neutral (3). Hence, The ACE module is highly effective in enhancing entrepreneurial knowledge. This suggests it is a valuable part of the incubator program in building entrepreneurship skills.

11) How practical and applicable was the content of "The ACE" module to your business or business idea? Se jauh mana kandungan modul ini praktikal...n kepada perniagaan atau idea perniagaan anda?

32 responses

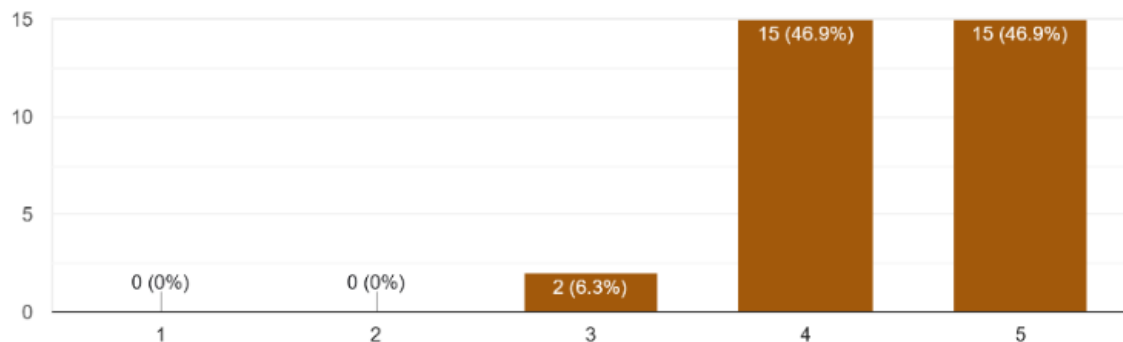


Figure 18: The content of ACE module

Based on figure 18, 93.8% rated the content as practical or very practical for their business ideas.

12) Did the module help you to develop or refine your business plan? Adakah modul ini membantu anda membangunkan atau menambah baik pelan perniagaan anda?

32 responses

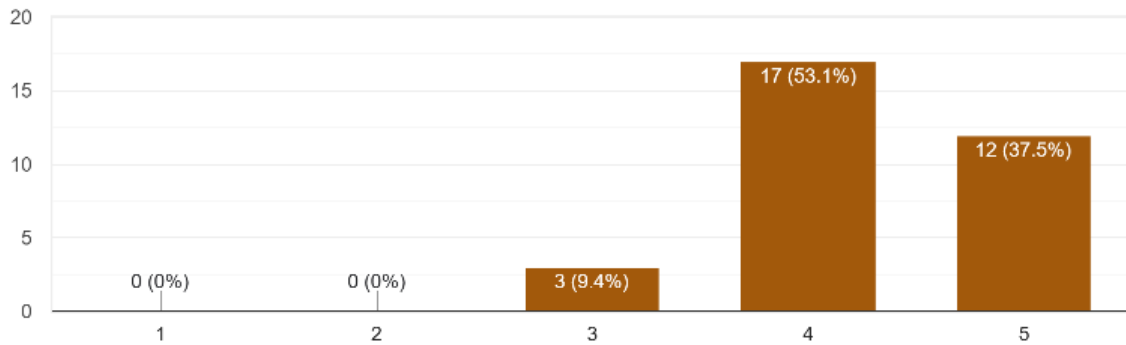


Figure 19: ACE and business plan

Majority (90.6%) of respondents agreed that the module helped them develop or refine their business plans.

13) Did "The ACE" module improve your confidence in starting or running a business? Adakah modul ini meningkatkan keyakinan anda untuk memulakan atau mengurus perniagaan?

32 responses

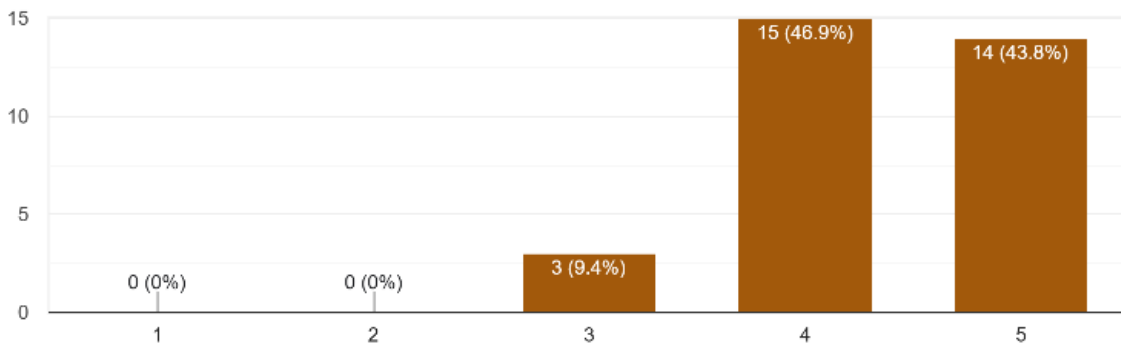


Figure 20: The ACE module and confidence in running a business

Figure 20 shows that most of the respondents 29 out of 32 agreed that the ACE module have improved their confidence level in running a business.

14) How well did the module help you in developing entrepreneurial skills such as leadership, creativity, risk-taking, and problem-solving? Seja...viti, pengambilan risiko dan penyelesaian masalah?

32 responses

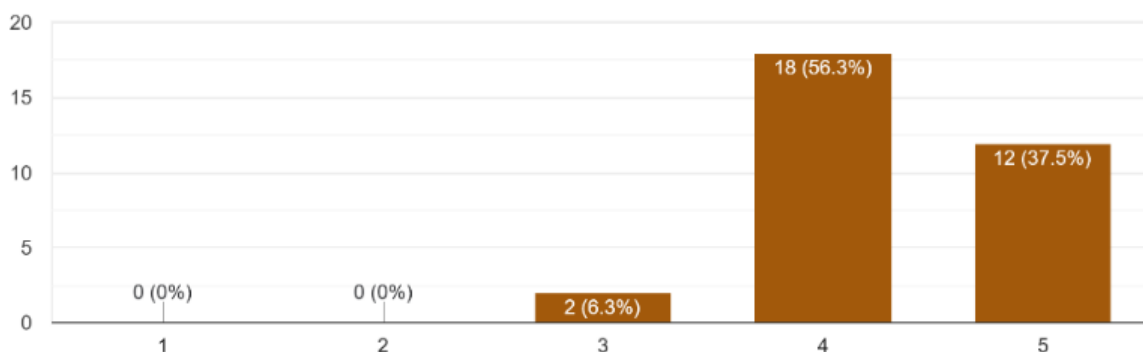


Figure 21: The ACE module and skills development

As shown in Figure 21, most respondents (93.8%) expressed agreement that the ACE module contributed to the growth of their skills, particularly in areas like leadership, creativity, and problem-solving. This indicates that the module was effective in equipping students with practical abilities that are crucial not only for entrepreneurship but also for personal growth and professional success. The focus on leadership helps students take initiative and guide teams, while creativity fosters innovative thinking essential for identifying new opportunities. The enhancement of problem-solving skills prepares students to tackle challenges proactively and find effective solutions, which is a key competency in any business environment. Overall, the positive feedback suggests that the ACE module plays a vital role in building a well-rounded skill set that supports students' entrepreneurial journeys.

15) Did the module provide useful tools or frameworks for entrepreneurship (e.g., Business Model Canvas, Lean Startup, etc.)? Adakah modul ini me...nan (cth: Business Model Canvas, Lean Startup)?
 32 responses

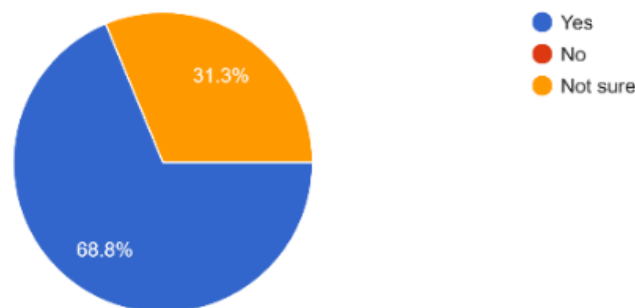


Figure 22: The ACE and useful tools or frameworks for entrepreneurship

As illustrated in Figure 22, majority of respondents, 68.8% responded that the ACE module has provided them with useful tools or frameworks for entrepreneurship, such as the Business Model Canvas. Meanwhile, 31.3% of respondents indicated uncertainty about whether the module provided such tools. This suggests that while the tools may have been introduced, there could be room for improvement in how they are integrated into the teaching and learning process.

16) Do you feel more prepared to launch or grow your business after completing the module? Adakah anda merasa lebih bersedia unt...gkan perniagaan selepas menamatkan modul ini?
 32 responses

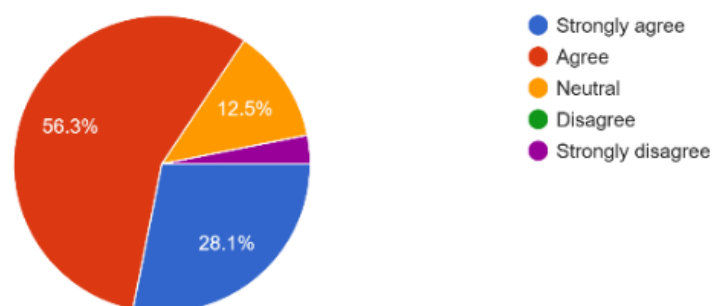


Figure 23: Readiness to grow or launch business

The data in Figure 23 reveals that most respondents (84.4%) either "agree" (56.3%) or "strongly agree" (28.1%) that they feel more prepared to launch or expand their business after completing the ACE module. This strong positive response suggests that the module has been effective in

building foundational entrepreneurial competencies among participants. Meanwhile, 12.5% of respondents selected “Neutral,” indicating that while they may have found the module informative, they might still require further guidance or experience before acting on a business idea. Additionally, a small percentage (3.1%) strongly disagreed, which could be attributed to individual learning preferences, prior expectations, or challenges in applying the concepts to their specific contexts.

17) Were you encouraged to reflect on your learning and entrepreneurial journey throughout the module? Adakah anda digalakkan untuk membuat...rjalanan keusahawanan anda sepanjang modul?
 32 responses

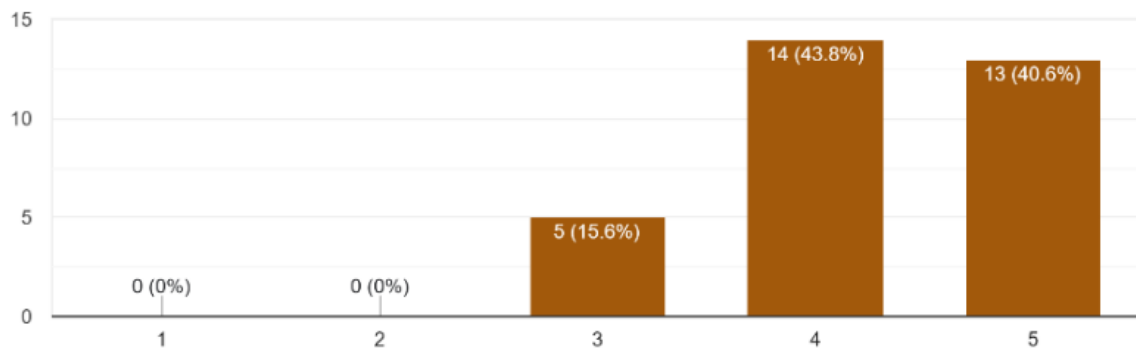


Figure 24: Reflection on learning and entrepreneurial journey

The data shows that an overwhelming majority of participants felt encouraged to reflect on their learning and entrepreneurial development during the module. Specifically, 43.8% of respondents rated this encouragement at level 4, while 40.6% gave it the highest rating (5). This means that 84.4% of the respondents had a positive perception regarding the reflective nature of the module.

18) What specific teaching innovation(s) in “The ACE” module had the most positive impact on your learning? Apakah inovasi pengajaran khusus dalam...ri kesan paling positif kepada pembelajaran anda?
 32 responses

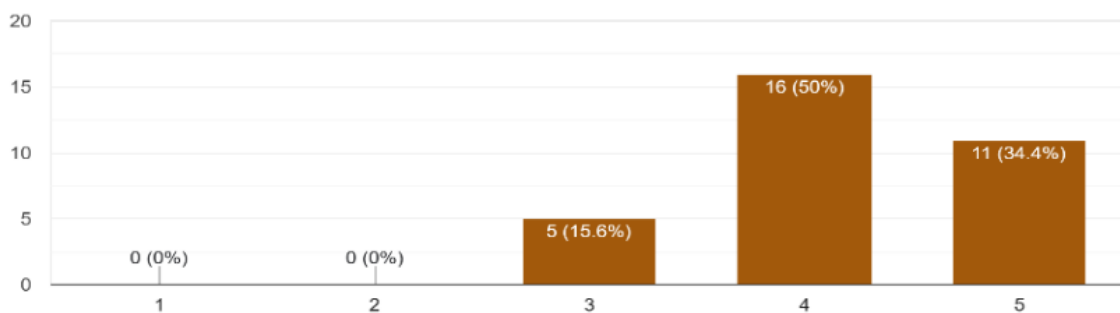


Figure 25: Teaching innovation(s) in “The ACE” module had the most positive impact on learning

The figure 25 illustrates participants’ perceptions of the teaching innovations that contributed most positively to their learning experience. A combined 84.4% of the respondents rated the impact of these innovations as either (4 or 5), with 50% selecting 4 and 34.4% selecting 5. These ratings clearly suggest that the innovative approaches embedded within the ACE module were well-received and significantly enhanced the learning experience. Meanwhile, 15.6% of respondents gave a neutral score of 3, indicating that a small proportion of participants may have found the innovations moderately impactful, or possibly were unsure about their effectiveness.

19) Innovative teaching approaches were used throughout the incubator (The Port) and “The ACE” module. Pendekatan pengajaran inovatif digunakan...epanjang program inkubator dan modul “The ACE”.
 32 responses

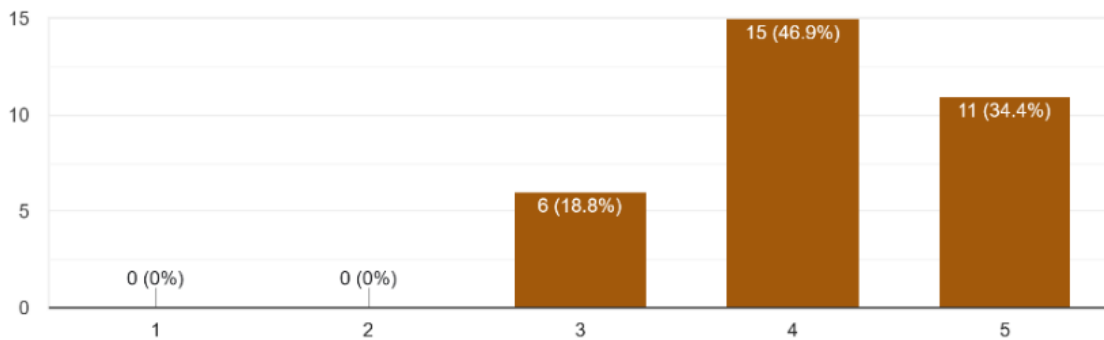


Figure 26: Innovative teaching and learning throughout the Port and the ACE module

Figure 26 reveals that a combined 81.3% of participants rated the use of innovative teaching approaches as highly effective, with 46.9% giving a score of 4 and 34.4% assigning a 5, the highest rating. These ratings strongly indicate that learners acknowledged and appreciated the innovative teaching methods employed throughout both programs. Meanwhile, 18.8% of respondents gave a neutral score of 3, suggesting that while these participants did not find the methods ineffective, they may not have experienced their full potential or preferred more traditional approaches. Meanwhile, no participants selected ratings 1 or 2, meaning none perceived the port and ACE module as poor or ineffective.

20) Do you consider the teaching in the ACE module and incubator (The Port) to be innovative compared to other academic courses? Adakah anda...ebih inovatif berbanding kursus akademik lain?
 32 responses

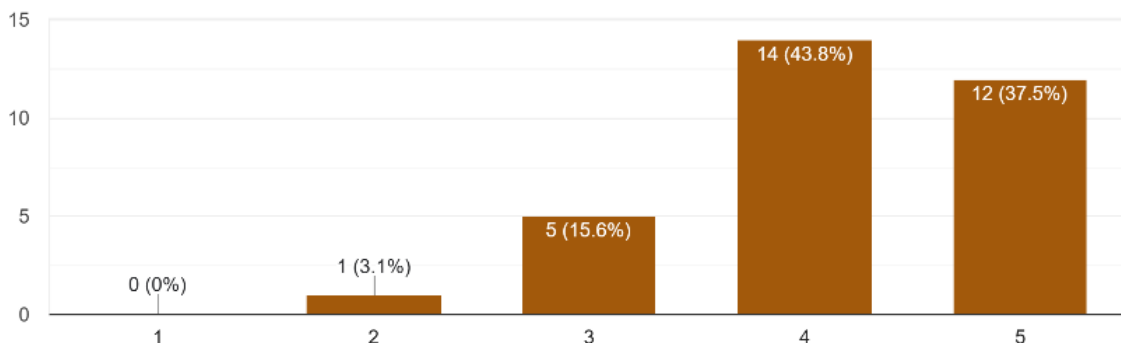


Figure 27: The ACE module and incubator (The Port) to be innovative compared to other academic courses.

Out of 32 respondents, 43.8% rated the teaching as a 4, 37.5% gave it a perfect score of 5, 15.6% gave it a 3, Only 3.1% rated it 2 and 0% chose 1, indicating no respondents found it the least innovative. This means that a combined 81.3% of participants agree or strongly agree that The ACE and The Port offer a more innovative learning experience than their regular academic courses.

5. Conclusion and Recommendations

This study will contribute to the growing body of entrepreneurial learning, it demonstrates how non-traditional learning environments, like The Port, can be integrated into academic education

to create transformative learning experiences. Also, it offers a replicable framework for other institutions aiming to align entrepreneurial practice with academic rigor. The positive responses reflect a strong endorsement of the unique educational strategies embedded in both The ACE and The Port. Both, The Port and ACE module combined hands-on entrepreneurial simulations, use of real-world tools like Business Model Canvas, peer-to-peer learning and feedback and opportunities for practical reflection.

The findings suggest that the module stood out significantly from traditional lecture-based or theory-heavy academic settings, likely due to its experiential and applied learning orientation. Table 3 shown the proposed framework integrating The Port and the ACE module.

Table 3: The Proposed Framework Integrating the Port and The ACE Module

Aspect	The ACE (Entrepreneurship Module)	The Port (Entrepreneurship Incubator)	Teaching & Learning Innovation
Purpose	Provides theoretical foundation in entrepreneurship	Facilitates real-world application and venture development	Bridges theory and practice through experiential learning
Learning Approach	Structured, curriculum-based learning	Self-directed, project-based incubation	Student-centered, practice-based
Activities	Ideation, business model design, case studies, reflection	Mentoring, pitching, networking	Active learning, real-world problem solving
Student Role	Learner, idea generator	Innovator, entrepreneur	Active representative in knowledge creation and application
Skills Developed	Critical thinking, business insight, creativity	Problem-solving, resilience, leadership, adaptability	Enhances graduate attributes across domains
Assessment	Formative and summative (business plans)	Non-graded but outcome-focused (venture progress, mentorship feedback)	Blends formal assessment with real-world feedback

The shift in the labour market from manufacturing to business services has reshaped the demand for skills, and higher education must once again adapt to meet the evolving needs of employers. Therefore, in today’s digital economy, it is essential for universities to equip graduates with strong digital competencies to ensure their competitiveness (Universities UK, 2025). On top of that, one key area of opportunity lies in the use of Artificial Intelligence (AI). Students can leverage AI tools not only to promote their products and services but also to generate content for marketing campaigns, enhancing their entrepreneurial and digital marketing capabilities.

5.1 Recommendations for Improvement of the ACE Module and The Port

The ACE module and The Port program were positively received, but participants have suggested several key areas for improvement to further enhance the effectiveness and sustainability of the program.

5.1.1 Improve Facilities

Participants highlighted issues with electrical facilities and the physical environment at The Port. Thus, upgrading these facilities would create a more conducive environment for both learning and business activities.

5.1.2 Introduce a Shared Social Media Platform

The establishment of a dedicated social media platform involving all entrepreneurs and students at the UiTM Johor Branch Segamat campus is recommended. This platform would enhance communication, increase visibility of student businesses, and encourage community support and collaboration.

5.1.3 Expand Skill-Based Knowledge and Content

Respondents expressed interest in having more skill-based learning opportunities included in the module. This could involve workshops, hands-on training, or mentorships tailored to specific business skills and trades.

5.1.4 Monitoring and Support from UiTM

An oversight and involvement from UiTM, particularly to ensure consistency performance among participants which include regular performance evaluations could be introduced.

5.1.5 Increase Collaborative Events and Programs

Participants suggested organizing more programs and events, particularly in collaboration with other student associations. These activities would attract more engagement, create networking opportunities, and drive sales and exposure for student businesses.

5.1.6 Sustain Program Drive

Finally, to ensure long-term success, the ACE module and The Port initiative must be maintained with consistent momentum and visibility. Regular events and updates will help keep participants actively involved and motivated.

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Conflict of Interest Statement

The authors declare that there is no conflict of interest regarding the publication of this study.

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