

Perception of Readiness among Malaysian and Indonesian Accounting Students in the Sustainable Development Goal (SDG) No. 13 Pitching Video Competition

Corina Joseph¹, *Azura Ahmad¹, Mariam Rahmat¹, Saifulrizan Norizan¹, Taufiq Arifin²

¹Faculty of Accountancy, Universiti Teknologi MARA, Cawangan Sarawak, Kampus Samarahan, Malaysia

²Faculty of Economics and Business, Universitas Sebelas Maret, Indonesia

Email: *azura545@uitm.edu.my

Corresponding Author: Azura Ahmad

Abstract: Universities worldwide play a critical role in advancing Sustainable Development Goal (SDG) No. 13 through both formal curricula and informal educational initiatives. Simultaneously, the internationalization of higher education has become a prominent strategic priority. One such informal initiative is the SDG No. 13 Pitching Video Competition, implemented through a competition-based learning (CBL) approach to foster climate awareness and action among students. This study investigates accounting students' perceived readiness to participate in this competition-based learning activity. A structured questionnaire was designed and administered to undergraduate accounting students from Malaysia and Indonesia, who participated in an international academic webinar jointly hosted by two public institutions: University A in Sarawak, Malaysia, and Universitas B in East Java, Indonesia, in October 2024. Descriptive statistical analysis was employed to evaluate the responses. The findings revealed that over 80% of participants expressed agreement with 23 out of 32 survey items, indicating a strong level of readiness to engage in the SDG No. 13 pitching video competition. The paper concludes with a discussion of the implications of these findings, alongside the study's limitations and avenues for future research. This paper promotes the connection between experiential learning and global sustainability goals, which helps shape a generation of graduates who are both skilled and globally aware.

Keywords: *Internationalization, higher education, competition-based learning, sustainable development goals*

1. Introduction

Climate change is one of the most challenging scenarios involving humanity that alerts the United Nations to introduce Sustainable Development Goal (SDG) No. 13. Actions to address climate change and its consequences are urgently needed. Achieving this goal requires engagement from various sectors, including the education system. Higher education institutions have an important role in enhancing sustainability and act as an instrument in preparing future professionals by developing skills, knowledge, and awareness essential to tackle sustainability-related issues (Leal Filho et al., 2019; Lozano et al., 2017). Higher education Institutions have made efforts to integrate sustainability into their academic and operational frameworks, combining interdisciplinary programs such as economics, environmental science, engineering, and social sciences as strategies to foster a comprehensive understanding and innovative problem-solving among students (Žalėnienė & Pereira, 2021). Higher education institutions are the pillar to produce future leaders who would contribute to the implementation and success of the SDGs. Institutions such as Malaysia-Japan International Institute of Technology (MJIT) have strategically aligned their academic and research pillars with the SDGs to contribute to sustainability efforts since 2012 (Wan & Abdullah, 2021). Higher education institutions (HEIs) highly contribute to various SDGs including Goal 1 (No Poverty), Goal 3 (Good Health and Well-Being), Goal 5 (Gender Equality), Goal 8 (Decent Work and Economic Growth), Goal 12 (Responsible Consumption and Production), Goal 13 (Climate Action) and Goal 16 (Peace, Justice and Strong Institutions) (Žalėnienė & Pereira, 2021). However, changes are essential in embedding sustainability principles into the education system as well as the organizational culture, for instance, the curricula and modus operandi (Žalėnienė & Pereira, 2021). By gaining insights into students' perceptions, educators can more effectively design curricula that cultivate sustainability-oriented competencies.

Competition-based learning (CBL) has emerged as a dynamic pedagogical approach aimed at enhancing student engagement and fostering real-world problem-solving abilities. Competition-based learning (CBL) is an educational strategy to motivate and engage students in the learning process (Issa et al., 2014). In this approach, the students are encouraged to work as a team, enhancing knowledge, improving skills, and deepening their understanding of the concept. Through this technique, students develop problem-solving skills, teamwork, and promote life-long learning (Issa et al., 2014). Competition-based learning (CBL) fosters a sense

of ownership over learning and collaborative efforts, significantly improving learning outcomes in technical disciplines (McGuire, 2025). Competition-based learning is a new model that utilizes two well-known learning models, namely the Project-Based Learning (PJBL) and competitions (Issa et al., 2014). According to Issa et al. (2014), the model is an alternative solution to the lack of motivation, self-esteem, insufficient practical and real-life experience, and inadequate teamwork practices. Components of CBL were presented clearly in (Issa et al., 2014), including the course outline relevant to the course objective, requirements that must resemble real-world problems, well-defined competition rules, a reward system, communication with team members and mentors, a judging committee, and collective learning taking place throughout the process. According to Issa et al. (2014), Competition-based learning enhances students' learning experience and boosts the outcomes of learning compatible with the objective of the curriculum. By engaging in this competition, students can connect with the faculty and their classmates better in CBL (Joseph & Rahmat, 2019). Educational intervention strategies such as Project-Based Learning (PJBL) have effectively improved students' understanding and perception of the SDGs CBL model (Espino-Diaz et al, 2025). Through the combination of PJBL and competition, the CBL model could overcome students' deficiencies such as lack of motivation, self-esteem, insufficient practical, real-life experience, and inadequate teamwork practices (Issa et al., 2014). It also prepares them for real-world challenges and initiates collaboration between universities.

According to Joseph et al. (2021), CBL promotes SDG awareness by shifting students from passive recipients to active contributors who apply not only theoretical knowledge but also internalize the practical relevance of SDG No. 13. Such an experiential approach fosters critical thinking, creativity, collaboration, and a sense of personal responsibility towards environmental sustainability (Leal Filho et al., 2019). Competition-Based learning (CBL) can bridge the gap between academic knowledge and societal needs as students engaged in competition, focusing on SDG-related themes, create higher awareness of sustainability for integrating SDG principles into future career aspirations (Joseph et al., 2021). Countries like Malaysia and Indonesia are particularly exposed to the adverse impacts of climate change, highlighting the urgent need for educational strategies that foster climate resilience. The pitching video competition is a non-formal education as part of the university's internationalization approach for sustainable development activity to improve students' awareness of this important global agenda (Joseph et al., 2022). According to Joseph et al. (2022), non-formal learning encompasses activities outside the classroom or academic syllabus aimed at achieving the university's SDG objectives, such as participating in a pitching video competition. Another example of a non-formal education activity, such as Solutions Story Tracker provided by the Solutions Journalism Network, was used to identify and explore solutions based on journalism stories in the non-formal education field (Almeida & Morais, 2025).

Increasing global temperatures, rising climate extremes, and accelerating ecological degradation have translated climate change from a remote matter into an urgent predicament. The risks are high for countries nations i.e., Malaysia and Indonesia, in which coastal people, biodiversity hotspots, and climate-sensitive economies are at risk. At this point, higher education is not only a knowledge provider, nonetheless in addition a crucial agent for developing the problem-solvers, innovators, and leaders necessary to navigate an undefined climate outlook.

Realizing this pressing situation, the United Nations established Sustainable Development Goal (SDG) 13, which demands urgent action to fight against climate change and its effects. Higher education institutions (HEIs) perform a crucial role in realizing this objective by preparing graduates with the knowledge, skills, and values required to tackle sustainability challenges (Leal Filho et al., 2019; Lozano et al., 2017). Even though several HEIs incorporate sustainability principles into academic programs and operations, non-formal learning opportunities can support these efforts by promoting effective engagement and applied problem-solving (Žalėnienė & Pereira, 2021).

Competition-based learning (CBL) is one such pedagogical approach, combining project-based learning with well-defined competition to improve motivation, teamwork, critical thinking, and lifelong learning (Issa et al., 2014; McGuire, 2025). Competition-based learning provides a pragmatic possibility for students to associate academic knowledge with actual climate challenges, encouraging both competence and personal responsibility when supported with sustainability themes (Joseph et al., 2021).

Notwithstanding its potential, limited research examines how students in climate-vulnerable nations recognize their readiness to engage in sustainability-focused CBL activities, specifically in the accounting discipline, in which sustainability reporting and climate-related risk appraisal are progressively important professional competencies. This study addresses this gap by investigating Malaysian and Indonesian undergraduate accounting students' readiness to participate in an SDG No. 13 pitching video competition presented within the CBL framework. As a result of positioning the activity within a cross-border higher education collaboration, the study offers insights into how non-formal, experiential learning can promote sustainability education in countries confronting severe climate risks.

2. Literature Review

Competition-based learning (CBL) and its importance

According to Issa et al. (2014), CBL is a paradigm that incorporates contests and PBL within a networked environment supported by open-source Learning Management Systems. This model places great emphasis on collaborative learning and outcome-oriented tasks. Competition-based learning offers educators an alternative answer to many of the shortcomings associated with traditional learning procedures, such as a lack of motivation, low self-esteem, insufficient practical and real-life experience, and ineffective teamwork activities. Usman et al. (2024) performed classroom action research using a PBL methodology for 100 students in the sixth semester of the Public Sector Accounting study program. The study discovered that the PBL technique boosted student creativity while also improving abilities in learning innovative goods and entrepreneurship. According to Issa et al. (2014), CBL distinguishes itself from both PBL and competitions by keeping PBL's advantages while limiting the disadvantages of competitive learning. Chang and Lin (2024) further affirmed that the CBL model successfully combines competition and PBL, strongly emphasizing teamwork and results. Team members become more motivated because of this strategy, which encourages them to improve their results and apply what they have learned to real-world situations. Students' involvement in online problem-solving contests may improve their information technology skills, and showcasing tournaments can boost their competitive abilities. These findings are demonstrated by involving students in creative problem-solving tasks in information competitions (Chang & Lin, 2024). Chen et al. (2020) discovered that competition in digital game-based learning (DGBL) was successful for math, science, and language but ineffective for social science and other topics. It worked well for puzzles, strategy, role-playing, and simulations, but not for action games.

Murray (2019) examined the application of competition as an instructional approach to improve students' problem-solving abilities. He discovered that while competition may stimulate high-achieving students, it can have adverse effects on others, potentially reducing student engagement. For example, competition between tutors and bilingual students highlighted the limitations in this teaching approach. Therefore, incorporating collaboration into competition enables teachers to guarantee that all students can engage and attain the same level of learning as their high-achieving peers. Joseph et al. (2022) also shared that non-formal education conducted through CBL encouraged teamwork. Their findings showed that 90% of respondents believed that competition improved students' presentation skills, public speaking, time management, problem-solving, managerial abilities, confidence, as well as self-awareness.

Meanwhile, research by Liu et al. (2022) and Abushakra et al. (2019) emphasized the benefits of competitions for students' growth. According to Abushakra et al. (2019), Omani students' soft skills and business perspective were improved by entrepreneurial challenges, which allowed them to pick up new abilities and keep abreast of industry advancements while findings by Liu et al. (2022) found that team-based competitions were very successful in increasing students' motivation, engagement, communication, and vocabulary levels in English vocabulary classes. Additionally, the study by Lei et al. (2016) demonstrated that introducing a competition mode into problem- or case-based learning assisted medical students thoroughly comprehend clinical diagnosis and treatment of severe infections.

Pitching video competition

A pitching video competition is an educational or entrepreneurial activity where participants produce brief videos to present ideas or business plans. According to some studies, pitching competitions have an impact on education. For example, hands-on activities like pitching are frequently more effective than theory-based instruction (Rideout & Gray, 2013) as "learning by doing" is a more successful method to develop practical skills

and entrepreneurial attitude than lectures in the classroom (Rasmussen & Sorheim, 2006) and increase students' intentions to start businesses (Walter et al., 2013). The use of video competition as a pedagogical tool in higher education has been studied by Joseph and Rahmat (2018), who discovered that competition-winning videos are excellent learning aids in higher education, encouraging student autonomy, engagement, and hands-on, technology-supported learning in accounting classes.

A study by Hossen et al. (2022) found that the educators of the Strategic Management course in Universiti Teknologi MARA used a competition-based learning methodology to hold a pitching video competition for proposing a business plan during the COVID-19 pandemic. Seventy percent of respondents in this study shared that the competition helped them establish company plans and motivated them to learn on their own. According to Oh et al. (2025), students' business planning, communication, and critical thinking abilities were much improved by business pitching competitions. These competitions also demonstrate how entrepreneurial education can be embedded in vocational training, with numerous proposals portraying real-world potential.

One of the examples of pitching activity is investor relations (IR) communication technology. According to Balakhonskaya and Balakhonsky (2021), pitching is an investor relations (IR) communication technology that is a structured exchange between a business entity and the investment community to showcase an innovative project and convince potential investors of its low risks and financial viability. Pitching, as an IR tactic, is a pre-planned, goal-oriented speech given to investors. To improve the efficacy of the communication process, pitching is usually accompanied by visual assets (such as slideshows or product demos).

In evaluating the pitching video competitions, judging criteria are considered important elements. Videos are assessed based on clear problem-solution identification and concept inventiveness (Pitch to the Pack, n.d.; INNOVEX 2025, 2025). Market analysis, company model, and scalability potential are among the most important criteria (GITEX Asia, 2025). Social and environmental effects are also considered in SDG contests (INNOVEX 2025, 2025). Presentation clarity, structure, and visual appeal are critical (SparkHub Youth, 2024). Other imperative elements include presentation structure, visual appeal, team competency, financial feasibility, and the skill to confidently answer during question-and-answer sessions (GITEX Asia, 2025; SparkHub Youth, 2024). These principles aid in the identification of meaningful, realistic ideas that foster long-term innovation.

Sustainable development goals (SDG) pitching video or other competition.

The SDG pitching video competition provides an opportunity for participants to propose innovative solutions to real-world problems. The findings by Saari et al. (2025) showed that the most frequently mentioned SDGs in the pitches were sustainable infrastructure (SDG No. 9), sustainable cities and communities (SDG No. 11), sustainable mobility linked to renewable energy (SDG No. 7), sustainability analytics to measure climate action (SDG No. 13), and solutions for sustainable consumption and production (SDG No. 12).

Several noteworthy competitions and projects have been established that integrate the SDGs of the United Nations with various formats for presenting videos. For example, UNESCO hosted a 2-minute video competition called SDG Action Reel in honor of World Engineering Day 2025, in which participants were encouraged to highlight their practical contributions to any of the 17 SDGs. Using digital storytelling, this competition aimed to inspire global action, increase awareness, and bring about significant change by documenting sustainable practices that influence day-to-day living, community initiatives, or creative solutions (UNESCO, n.d). As part of the effort to introduce the younger generation, including students in schools, colleges, and universities, to SDG-related situations, UNITAR International University created the ASEAN Future Sustainable Leaders (AFSL) 2023 competition. This effort assessed participants' ability through five-minute videos, pitching, and question-and-answer sessions, while also encouraging ASEAN nations to expose students to possible exchange programs. Such activities aim to improve the educational experience and assist in producing a future generation of leaders with SDG-based knowledge and competence (UNITAR, 2023).

In support of the SDGs, Joseph et al. (2022) held an informal learning activity for accounting students called the 3 Minutes SDGs Ideas Video Competition, which was hosted by two public universities. The study discovered that 90% of respondents thought that video competition was beneficial in raising awareness of the SDG. This indicates the effectiveness of the SDG video competition in improving knowledge acquisition and implementation of SDGs in higher education institutions.

Readiness perception to enter the competition

In every tournament, being ready to compete is crucial since it demonstrates the competitors' self-assurance and readiness to fulfill the conditions. An element that affects student competitiveness is expectation value beliefs, in which Wu et al. (2025) stated that people are driven to complete activities when they value the result and feel they can succeed. However, fear of failure might have an impact on driving. In a similar manner, Kaplánová (2024) found that football players' self-esteem and anxiety levels had a significant impact on their preparedness to perform. Those who have greater self-esteem and less anxiety are better equipped to succeed because they can successfully accept criticism, create objectives, manage obstacles, and stay focused.

Joseph et al. (2021) investigated accounting students' perceptions of readiness to participate in the CBL activity of preparing a business proposal pitching video for the Strategic Management course with the theme 'Sustainable Business Solutions or Ideas in Response to COVID-19 Pandemic'. According to the results, over 80% of the students were prepared for the competition since they desired to win, impress judges, improve their resumes, and receive a certificate of participation. They were extremely well-prepared; they followed directions from the beginning, monitored their progress frequently, urged teammates to keep on course, practiced their pitch, made sure their video was ready, and asked their lecturer for advice. Meanwhile, Radzi et al. (2020) conducted a CBL research to investigate participants' perceptions of the first accounting course online quiz for non-accounting majors as preparation for the final round quiz. Their findings noted that over 40% of respondents opted to enter this competition because of the certificate of participation.

Lachebo et al. (2024) examined the students' readiness for secondary school science competitions in southern Ethiopia. They discovered that gender, instructor dedication, and supplementary support all had a substantial influence on involvement. Poor research abilities, little technical expertise, and inadequate English ability were among the most significant hurdles. School officials, teachers, parents, and members of the community must all work together to increase engagement. According to Nguyen et al. (2021), in recent years, Taiwan has held several scientific and technology contests to encourage students' curiosity and inventiveness. The integrated science, technology, engineering, art, and math (iSTEAM) competition is one example. Its goal was to encourage Taiwanese rural kids to participate in a competition that focused on creating small models. The findings demonstrated that students who took part in the competition had a high level of self-efficacy in creating miniature models, valued the challenge, and were prepared for the competition. They also showed positive attitudes regarding teamwork and cooperation. In conclusion, developing soft skills, taking advantage of experiential learning opportunities, and receiving institutional support are all components of being prepared to compete.

Experiential learning theory (ELT)

Numerous learning theories are available to aid students in their educational journey. Experiential learning theory (ELT) is one of the theories that is frequently applied. Experiential learning theory (ELT), which was proposed by Kolb (1984), provides a platform for understanding the way learning occurs by incorporating real-world experience. According to Kolb (1984, p. 38), ELT is referred to as "the process whereby knowledge is created through the transformation of experience". According to Kolb (1984), experiential learning unfolds through a four-stage cycle: Concrete Experience, Reflective Observation, Abstract Conceptualization, and Active Experimentation, which guides learners from practice to reflection, conceptualization, and application. Through this theory, the learning experience was transfigured into knowledge that requires learners to perform, review, figure out, and implement. Effective learning necessitates a person to experience all four stages (Kolb, 1984).

Diverse methods for providing and assessing experiential learning are demonstrated by Tembrevilla et al. (2024) through a systematic literature review of 220 research articles spanning 25 years. One of the novel ways of experiential learning was the implementation of an entrepreneurial pitch project, in which students were able to create and propose technical and examined and analyzed in relation to Kolb's ELT framework. The study found that the process of preparing and giving business presentations was pleasant for students and improved their learning experience. The technique offered students with actual experiences while also demonstrating abstract understanding and active exploration. Meanwhile, Devi and Thendral (2023) conducted a study on 54 students over the 2021-22 academic year, using Kolb's ELT for the Data Structures and Algorithms (DSA) course, which is difficult to teach and understand owing to its complexity. Their study combined reflective practice with

active learning tactics, including role play, think-pair-share, and flipped classrooms. The findings showed that students gained a better conceptual knowledge, increased confidence, and improved their ability to select acceptable data structures for real-world applications. Furthermore, the reflective practice approach helped faculty refine their pedagogical skills, promoting ongoing progress in educational efficacy.

In another study, Nurunnabi et al. (2022) emphasized experiential learning as a critical component of clinical education, particularly at medical college hospitals, where bedside and ward-based learning environments offer unique opportunities when contrasted to standard classroom training. Each patient interaction is a distinct learning opportunity, allowing students to combine new information with past knowledge and experience. Experiential learning provides an integrated framework that combines education and patient care, improves clinical competence and professional abilities in medical education by immersing learners in direct experience combined with organized reflection. In addition, Choshi (2025) describes how the ELT can help nursing students learn in their first community health nurse practice course by using guided reflection to integrate experience into ideas and connect community-based clinical experience to their learning. Meanwhile, Wijnen-Meijer et al. (2022) specifically linked Kolb's ELT cycle to curriculum design in medical education. Real cases (CE), case-based discussions (RO), theoretical seminars (AC), and simulation-based practice (AE) were all incorporated into their methodology. Students valued the chance to rehearse similar scenarios in a simulated setting as well as the opportunity to discuss patient cases that they had directly experienced. Students gave this arrangement high marks, stating that the order of the ELT phases improved their abilities and self-assurance.

According to Tembrevilla et al. (2024), a pitching video competition is tightly aligned with Kolb's four stages, providing students with the opportunity to put theory into practice through hands-on participation. Pitch contest organizers can purposefully designate phases that align with each ELT stage: preliminary project work and brainstorming (CE), peer/mentor input (RO), connecting solutions to SDG frameworks (AC), and re-pitching ideas that have been developed (AE). Competitions run the potential of undervaluing the stages of thought and conceptualization and overemphasizing the performance component without this deliberate design, which would reduce their instructional value. (Kolb, 1984). Meanwhile, Kairi et al. (2024) reveal that the incorporation of CBL and experiential learning, combined with the other classical and active learning techniques, has motivated the students and indirectly sparked their interest in Science, Technology, and Mathematics (STEM). The results revealed that 96% are now pursuing their tertiary education in the field of STEM, that students are directly influenced and motivated using competition in the STEM modules to collaboratively appreciate the beauty of STEM education while learning it together with a mission to win the competition.

Smith et al. (2022) found that COVID-19 had impacted how pitching videos were conducted, which feature an online approach engaging participants in a hybrid format that enables cross-sectional participation, also to encourage the development of teleconferencing skills amongst the participants, which includes Zoom and video teleconferencing software programs to supplement the delivery of content and engagement. Research findings by AlQallaf et al. (2024) highlight that CBL through a three-day virtual reality (VR) hackathon on climate change education has enhanced the student's understanding of the SDGs and climate change issues, their competency with the VR technologies as well as teamwork and problem-solving issues. The approach was also successful in engaging and motivated the student's interest in the chosen SDGs include climate change. The hands-on learning approach was designed to foster active and collaborative engagement among participants (AlQallaf et al., 2024). The application of ELT in higher education may continue to change in the post-COVID-19 era due to a variety of factors, including changing student and institutional needs, the development of new technologies like virtual and augmented reality, and the increasing difficulty of creating efficient research methodologies to evaluate its growing applications in engineering education (Tembrevilla et al., 2024).

According to Van Hanh (2020), the experiential learning project is an effective approach to teaching students about hands-on experiments as an engineer. This research incorporated project-based activities and engineering design competitions that would motivate the interest of engineering students. A theoretical model of creating value in an experiential learning project through a contest was developed and applied at the Hung Yen University of Technology and Education. The new findings reveal that (1) the prize money of contest was not the major factor for the motivations in students' learning; (2) the attractiveness of a contest theme, more than one way of solving the problem and using high technology were the major factors that motivate students to learn; (3) the experiential learning project through contest had the greatest impact of development on the

theoretical knowledge of engineering design, and the skills, experiences and abilities to use technologies, and the power of teamwork to make decisions.

Overall, the evidence suggests that Kolb's ELT provides an adaptable framework for students' learning in a variety of subject areas. In the case of Malaysian and Indonesian accounting students, readiness is not merely a function of theoretical knowledge of climate action (SDG 13), but also the degree to which prior educational and co-curricular experiences have enabled them to cycle effectively through these stages. For example, Concrete Experience is embedded in prior sustainability-related coursework, participation in environmental campaigns, or earlier video-based assessments. Reflective Observation manifests in students' ability to evaluate the effectiveness of their previous presentations or sustainability initiatives, considering cultural and institutional contexts. Abstract Conceptualization involves synthesizing sustainability knowledge, communication theory and accounting relevance into a persuasive message aligned with SDG 13. Active Experimentation occurs in the actual pitching process, where students test and refine their approach using available technological, linguistic, and rhetorical tools. From this perspective, perceived readiness reflects a student's self-assessed capacity to navigate the ELT cycle in a high-stakes, interdisciplinary task. Differences between Malaysian and Indonesian students may arise from variations in experiential learning opportunities within their respective curricula, institutional pedagogies, and socio-cultural environments. By grounding readiness in ELT, the study shifts the focus from readiness as a static trait to readiness as a dynamic, experience-derived competence—a framing aligned with contemporary calls in higher education for sustainability competencies to be embedded in authentic, practice-based learning contexts (Lozano et al., 2017).

3. Methodology

Research Design and Instrument

This study used a quantitative design to examine accounting students' perceived readiness to participate in a competition-based learning (CBL) activity, the SDG No. 13 Pitching Video Competition. A structured questionnaire encompassing 32 items was developed, with several items modified from established CBL studies (Joseph & Rahmat, 2018; Radzi et al., 2020; Joseph et al., 2021) to ensure content validity. The instrument consisted of two sections: Section A captured demographic information, while Section B assessed readiness using a five-point Likert scale (1 = strongly disagree to 5 = strongly agree; midpoint = 3 = neutral).

Population, Sampling and Justification

The study population comprised undergraduate accounting students from two public universities, one in Malaysia (University A) and one in Indonesia (University B), purposively selected due to their active Memorandum of Understanding supporting joint academic and sustainability initiatives. In view of the non-existence of a complete sampling frame, convenience sampling was employed, intended for students who attended an international academic webinar co-organized by both universities. This indicates respondents' availability and relevance, as everyone had been exposed to the competition context during the webinar. The final sample comprised 77 students.

Data Collection and Analysis

The online questionnaire was distributed immediately after the October 2024 webinar. Descriptive statistics, i.e., frequencies, percentages, and mean scores, were used to analyze students' readiness levels. The independent t-test is conducted to examine the difference in the readiness levels between students in both universities.

4. Results and Discussion

Demographic Analysis

The first section of the analysis presented a descriptive overview of the respondents in the study. Table 1 shows the demographic characteristics of the respondents. In terms of gender, the majority of respondents were female (60%) compared to male (40%). In terms of age, the highest percentage (33.8%) was recorded by the 22-23 age group, followed by the 18-19 and 20-21 age groups with similar percentages (28.6%), and 9.1% by the 24-25 age group. The majority of respondents came from University A (50.6%) and University B (49.4%). In terms of duration, most respondents (39%) spent more than 30 minutes creating a presentation, while 28.6% spent between 1 and 10 minutes.

Table 1: Frequency Analysis for Respondents' Demographics

Item	Frequency	Percentage (%)
Gender:		
Female	51	60
Male	26	40
Age:		
18 -19 years old	22	28.6
20 -21 years old	22	28.6
22 - 23 years old	26	33.8
24 - 25 years old	7	9.1
Institutions:		
University A	39	50.6
University B	38	49.4
No of hours undertaken to prepare for this competition:		
Less than 1 hour	1	1.3
1 -10 hours	22	28.6
11 -20 hours	9	11.7
21 - 30 hours	15	19.5
More than 30 hours	30	39

Reliability Analysis

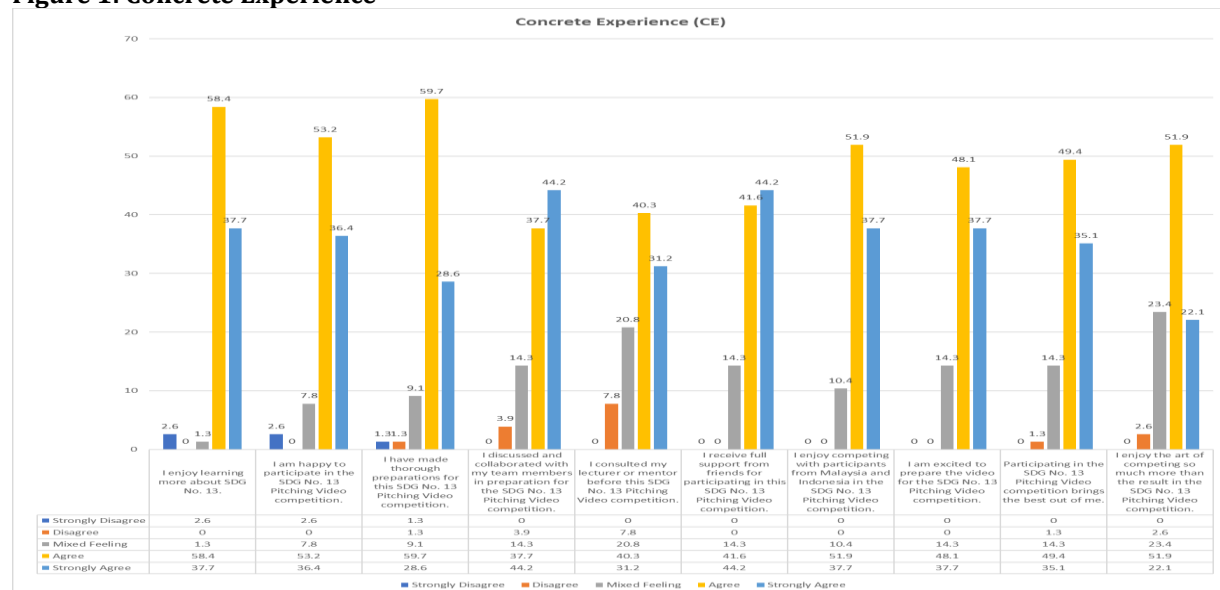
According to Sekaran and Bougie (2016), the reliability test was conducted to ascertain the inter-item consistency. Hair et al. (2013) stated that a Cronbach's alpha value of 0.7 or higher was adequate; however, Nunnally (1978) and Awang (2015) proposed a lower cut-off point where a value of at least 0.6 was acceptable. Regardless of the criteria taken into consideration, the current results were regarded as reliable and satisfactory. The reliability test's outcome is shown in Table 2.

Table 2: Cronbach's Alpha

Variable	Cronbach Alpha	Number of items
Perception of readiness among Malaysian and Indonesian accounting students to engage in the CBL	0.89	33

The result of the perception readiness among Malaysian and Indonesian accounting students to engage in the CBL activity in relation to SDG No. 13 is presented in

Figure 1: Concrete Experience

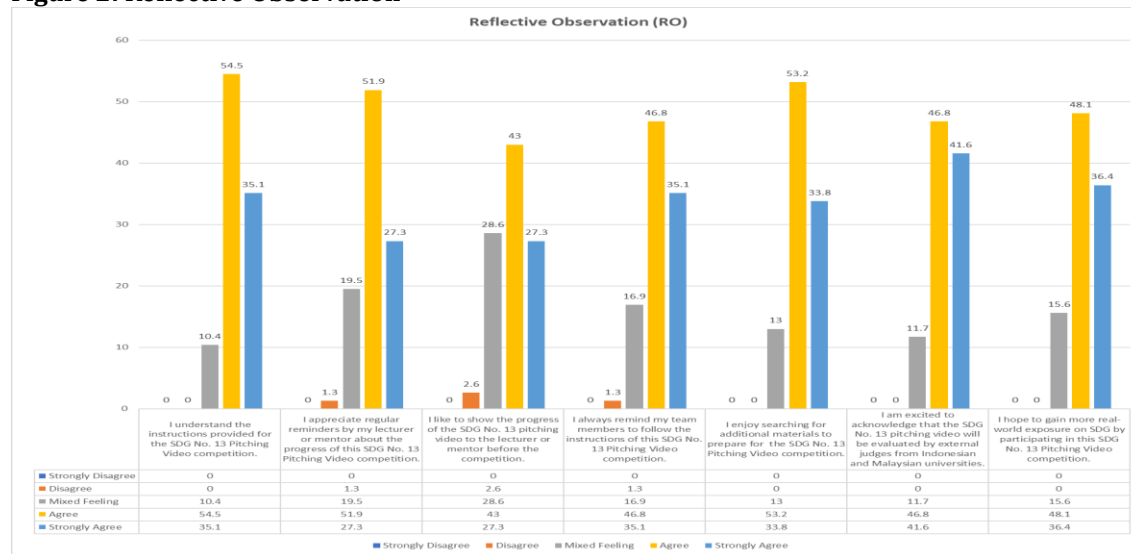


Kolb's Experiential Learning Theory (1984) emphasizes that meaningful learning begins with concrete experience, in which learners actively participate in real-life activities that expose them to concepts and difficulties. According to Figure 1, in the context of SDG No. 13, students who participate in the Pitching Video Competition acquire significant hands-on experience that goes beyond standard classroom learning. Enjoying the process of learning more about SDG No. 13, preparing thoroughly for the competition, and communicating with teammates all provide genuine opportunities to put information into practice. These experiences enable participants to feel emotionally linked to the issue, explore novel solutions, and gain confidence in dealing with real-world sustainability challenges. This aligns with a study undertaken by Van Hanh (2020); the experiential learning project is an effective approach to exposing students to hands-on experiences, especially in fields such as accounting, where practice and application are essential.

Furthermore, active participation and engagement in the competitive process demonstrate concrete experience. According to AlQallaf et al. (2024), a hands-on learning approach can foster active engagement and collaborative engagement among participants. Consulting with lecturers or mentors, receiving encouragement from friends, and competing with classmates from Malaysia and Indonesia all contribute to a more diverse learning experience by providing different viewpoints and support systems. Preparing and delivering the pitching video pulls out the best in participants while also instilling delight, excitement, and intrinsic motivation. These lived experiences exemplify Kolb's belief that true learning comes through doing when students immerse themselves in real-world activities, reflect on their actions, and turn these experiences into deeper knowledge and personal development.

The result of the perception readiness among Malaysian and Indonesian accounting students to engage in the CBL activity in relation to SDG No. 13 is presented in Figure 2 (Reflective Observation).

Figure 2: Reflective Observation



Based on Figure 2, students demonstrate Reflective Observation by reviewing their progress and thinking about what they have learned. For example, they listen to their lecturer's guidance, provide updates for comments, and encourage team members to respect the guidelines. This is aligned with Chang and Lin (2024), who demonstrated that involving students in creative problem-solving tasks within competition settings enhances their reflective learning process. Similarly, Murray (2019) supports this view by showing that competition serves as an effective instructional approach to improve students' problem-solving abilities. Together, these studies highlight those competitions like the SDG No. 13 initiative not only foster reflective thinking but also strengthen critical skills that prepare students for real-world challenges.

Students also reflect by gathering more materials, appreciating the opportunity to be judged by outside experts, and connecting the competition to real-world challenges concerning climate change. Through this reflection, students get fresh ideas and a greater knowledge of SDG No. 13, allowing them to learn beyond competition.

This reflection is consistent with Joseph et al. (2021), who discovered that students preparing for a pitching video competition not only aimed for recognition but also deepened their understanding of real-world issues, such as climate change by gathering resources, valuing external evaluation and connecting the activity to SDG 13.

Figure 3: Abstract Conceptualization

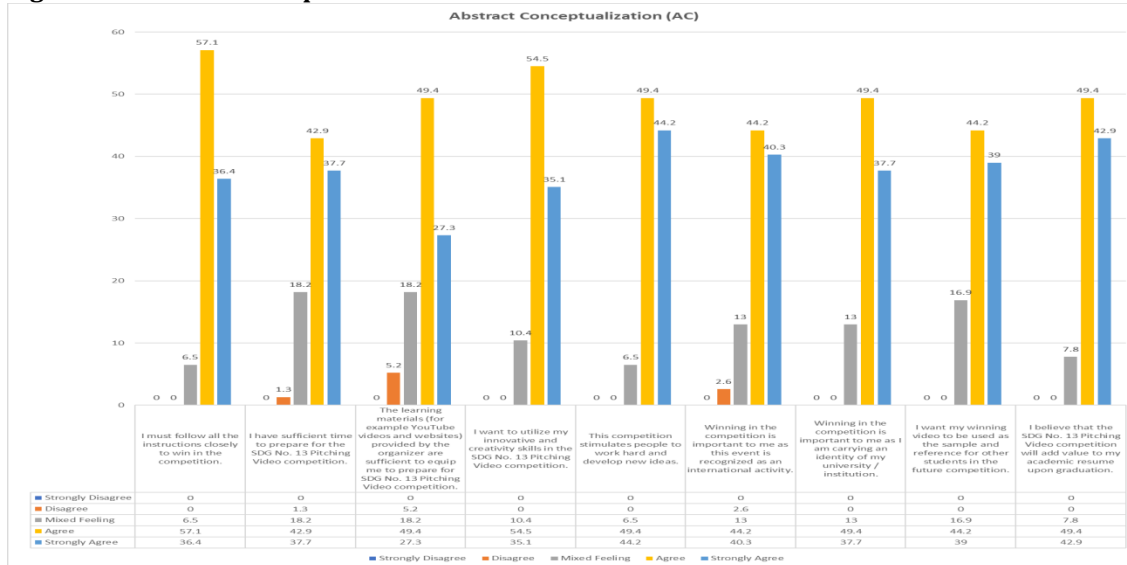


Figure 3 illustrates the concept of abstract conceptualization as outlined in Kolb's Experiential Learning Theory. In Kolb's Experiential Learning Theory, abstract conceptualization refers to the stage at which learners evaluate their experiences, draw lessons, and develop broad concepts that can guide future actions. The SDG No. 13 Pitching Video competition provides such a platform, as students must rigorously adhere to instructions, make good use of learning resources, and employ creativity and innovation to produce significant results.

These activities demonstrate how participants do more than just complete tasks; they evaluate, conceive, and use structured thinking to assure competition success. Usman et al. (2024) reported that the CBL technique could also boost student creativity while strengthening their abilities in learning innovative goods and entrepreneurship. Moreover, the results also showed that CBL encouraged problem-solving and critical thinking among students working in teams, as aligned with the findings of Murray (2019).

Figure 4: Active Experimentation

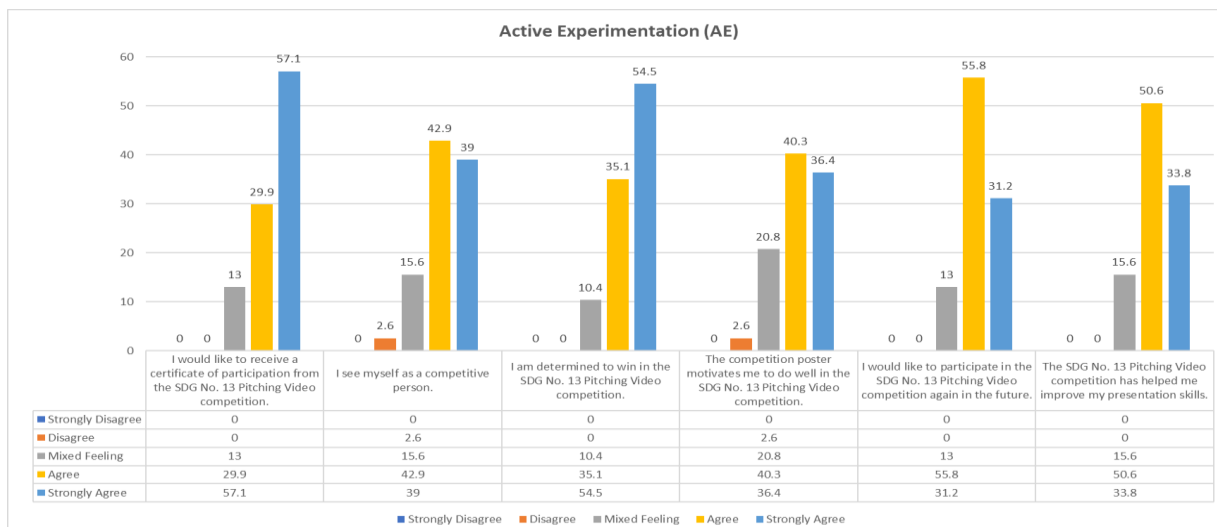


Figure 4 illustrates the concept of active experimentation as outlined in Kolb's Experiential Learning Theory. Kolb's Experiential Learning Theory defines active exploration as when students put what they have learned into practice. The SDG No. 13 Pitching Video competition exemplifies this, as students showcase their talents, remain determined to win and get the certificates, and also use the experience to better their presentation abilities. Radzi et al. (2020) also stated that more than 40% of respondents opted to enter this competition because of the certificate of participation.

This study demonstrates how students test ideas in a real-world situation, adjust their strategy, and plan for future growth. Their determination, competition, and eagerness to join again demonstrate how active experimentation promotes lifelong learning and development. This is aligned with a study done by Abushakra et al. (2019), entrepreneurial challenges improved Omani students' soft skills and business perspectives by allowing them to acquire new abilities for future growth and remain updated with industry advancements, while Liu et al. (2022) found that team-based competitions significantly enhanced students' motivation, engagement, communication, and vocabulary development.

An interesting finding from this study was that over 80% of students demonstrated a strong commitment to excelling in the CBL activity, primarily driven by their desire to uphold the reputation of University A and University B, as well as the activity's organization by the faculty. According to Joseph et al. (2022), 90% of respondents believed the video competition was beneficial in raising awareness of the SDGs. These competitions improved the educational experience and helped prepare a future generation of leaders equipped with knowledge and skills linked with the SDGs (UNITAR, 2023).

Descriptive Analysis

Table 4: Descriptive Statistics

Items	Mean	Standard Deviation
Perception of readiness among Malaysian and Indonesian accounting students to engage in the CBL	4.44	0.821

The results show that the mean score of 4.44 indicates a high level of perception readiness among Malaysian and Indonesian accounting students to engage in case-based learning (CBL), implying that the majority of respondents agree or strongly agree that they are prepared for this learning approach. The value of 0.821 suggests a moderate consistency level, indicating that the majority of students generally agree they are ready to engage in CBL.

Independent Sample T-Test

This test compares the mean scores of students from University A and University B to determine whether the observed difference in perception levels is statistically significant or attributable to random variation. A significant t-test result ($p < 0.05$) indicates that nationality influences students' readiness for CBL. Conversely, a non-significant result suggests that both groups exhibit comparable perceptions, supporting the view that CBL is positively received across contexts.

The independent samples t-test between University A and University B is presented below. Levene's test for equality of variances and the t-test for equality of means indicate no significant differences in perception of readiness between Malaysian and Indonesian accounting students with respect to engaging in CBL. Although the mean score of University A is slightly higher than that of University B, the difference is not statistically significant, as all significance values exceed the 5% threshold.

Table 5: Independent Sample T-Test

Variables	University	N	Mean	Std. Deviation	Std. Error Mean
Perception of readiness among Malaysian and Indonesian accounting students to engage in the CBL	University A	50	23.1677	4.04715	.28756
	University B	27	22.3398	4.50894	.36300

5. Conclusion

This study examines how prepared accounting students feel about participating in a competition-based learning experience, specifically the SDG No. 13 Pitching Video Competition. Based on the findings, it can be concluded that the SDG No. 13 Pitching Video competition was highly effective in engaging students, fostering motivation, and strengthening essential academic and professional skills. The majority of participants not only expressed satisfaction with the overall learning experience but also highlighted their enthusiasm for teamwork, creativity, and innovation throughout the competition. Their active involvement and positive attitudes toward the event align with earlier studies, confirming that competition-based learning (CBL) can enhance students' preparedness, confidence, and motivation to excel. The evidence also suggests that students perceived this activity as meaningful, particularly in terms of international exposure, institutional representation, and the tangible benefits of certification and a resume portfolio. Additionally, the results indicate that CBL, when integrated into sustainability-focused initiatives such as SDG No. 13, can significantly promote collaborative learning, critical thinking, and problem-solving skills. Students were driven not only by the desire to win but also by intrinsic motivation, such as enjoying the learning process, valuing lecturer support, and striving to contribute to global awareness of climate action. The strong commitment demonstrated by participants reflects how CBL fosters responsibility, resilience, and leadership qualities. These qualities are essential for preparing graduates to address complex global challenges. Overall, this competition successfully met its educational goals, positioning itself as a powerful pedagogical tool that blends knowledge acquisition with real-world application and global citizenship.

The practical implication of this study is that higher education institutions should systematically design and implement low-cost yet high-impact international initiatives, such as virtual competitions, cross-border collaborative projects, and joint workshops that provide experiential learning opportunities. These initiatives not only strengthen institutional networks and foster intercultural competence but also embed sustainability into the broader student experience in a way that is flexible, inclusive, and resource-efficient. By adopting such approaches, universities can position themselves as proactive agents of sustainable development, ensuring that their graduates are prepared to address complex global challenges with both competence and conviction.

This study offers valuable insights, yet several limitations warrant careful consideration. First, the sample was confined to undergraduate accounting students from two universities in Malaysia and Indonesia, restricting the generalizability of the findings across disciplines, institutional contexts, and cultural landscapes. Second, reliance on self-reported data introduces the risk of response bias, as participants may have provided socially desirable answers, particularly given the normative weight of sustainability-related issues. Finally, the cross-sectional design presents a temporal constraint, capturing student perceptions at a single moment rather than tracing their evolution across the duration of the learning activity. Future research should broaden its scope by incorporating a more heterogeneous sample across academic fields, institutional types, and cultural settings to strengthen the generalizability of the findings. Longitudinal designs would be especially valuable, enabling scholars to track trajectories of engagement, skill development, and attitudinal shifts over time. Complementing survey methods with qualitative approaches, such as in-depth interviews or focus groups, could yield richer insights into the lived experiences, motivations, and challenges of participants. Moreover, subsequent studies should examine the enduring impact of competition-based learning on students' academic pathways, professional readiness, and capacity for sustainability-oriented global citizenship, thereby deepening our understanding of its transformative potential.

References

- Abushakra, A., Khan, F. R., AbdulWahhab, R., & Al Maqbali, H. (2019). Innovation in entrepreneurship education through competition-based learning role: Students' perspective on the enhancement of soft skills. *Humanities & Social Sciences Reviews*, 7(5), 862-869.
- AlQallaf, N., Elnagar, D. W., Aly, S. G., Elkhodary, K. I., & Ghannam, R. (2024). Empathy, Education, and Awareness: A VR Hackathon's Approach to Tackling Climate Change. *Sustainability*, 16(6), 2461-2477.
- Almeida, F., & Morais, J. (2025). Non-formal education as a response to social problems in developing countries. *E-Learning and Digital Media*, 22(2), 122-138.

- Awang, Z. (2015). SEM Made Simple: A Gentle Approach to Learning Structural Equation Modelling, MPWS Publisher. *Bangi Selangor, Malaysia*.
- Balakhonskaya, L. V., & Balakhonsky, V. V. (2021, April). *Pitching as a communication technology and pitch as a tool for investor relations in the digital environment*. In S. Shaposhnikov & L. Sharakhina (Eds.), *Proceedings of the 2021 Communication Strategies in Digital Society Seminar (ComSDS 2021)* (pp. 166–172). IEEE. <https://doi.org/10.1109/ComSDS52473.2021.9422852>
- Chang, H. T., & Lin, C. Y. (2024). Applying competition-based learning to stimulate students' practical and competitive AI ability in a machine learning curriculum. *IEEE Transactions on Education*, 67(2), 256–265.
- Chen, S. Y., & Chang, Y. M. (2020). The impacts of real competition and virtual competition in digital game-based learning. *Computers in Human Behavior*, 104, Article 106171.
- Chen, C. H., Shih, C. C., & Law, V. (2020). The effects of competition in digital game-based learning (DGBL): a meta-analysis. *Educational Technology Research and Development*, 68(4), 1855–1873.
- Choshi, M. (2025). Addressing challenges in undergraduate community health nursing clinical: Kolb's Experiential Learning Theory. *Journal of Nursing Education*, 64(6), e31–e34.
- Devi, M. K., & Thendral, M. S. (2023). Using Kolb's Experiential Learning Theory to Improve Student Learning in Theory Course. *Journal of Engineering Education Transformations*, 37(1), 70–81.
- Espino-Díaz, L., Luque-González, R., Fernández-Caminero, G., & Álvarez-Castillo, J. L. (2025). Exploring the impact of project-based learning on sustainable development goals awareness and university students' growth. *European Journal of Educational Research*, 14(1), 283–296.
- Ezezika O., Gong, J. (2020). Experiential Learning in the Classroom: The Impact of Entrepreneurial Pitches for Global Health Pedagogy. *Pedagogy in Health Promotion*, 7(2), 118–126. doi:10.1177/2373379920930723
- GITEX Asia. (2025). *Supernova challenge pitch competition*. <https://gitexasia.com/supernova-challenge-pitch-competition>.
- Hossen, R., Joseph, C., Noyem, J. A., & Rahmat, M. (2022). Assessing the effectiveness of competition-based learning winning video as a pedagogical tool in preparing business plans among accounting undergraduate students. *International Journal of Academic Research in Business and Social Sciences*, 12(3), 27–39.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial least squares structural equation modelling: Rigorous applications, better results, and higher acceptance. *Long range planning*, 46(1–2), 1–12.
- INNOVEX 2025. (2025). *Judging criteria*. <https://www.innovex2025.com.my/judging-criteria>
- Issa, G., Hussain, S. M., & Al-Bahadili, H. (2014). Competition-based learning: A model for the integration of competitions with project-based learning using open source LMS. *International Journal of Information and Communication Technology Education (IJICTE)*, 10(1), 1–13.
- Joseph, C., & Rahmat, M. (2018). Exploring the perception of using the competition-based learning winning video as a pedagogical tool in an accounting course. *International Journal of Academic Research in Business and Social Sciences*, 8(2), 440–451.
- Joseph, C., & Rahmat, M. (2019). Factors influencing the effectiveness of the competition-based learning (CBL) activity among accounting undergraduates. *International Business Education Journal*, 12(1), 1–14.
- Joseph, C., Hossen, R., Rahmat, M., Noyem, J. A., & Boo Ho, V. (2021). Exploring the readiness for business proposal pitching video activity using the competition-based learning model among students. *International Business Education Journal*, 14(2), 13–24.
- Joseph, C., Norizan, S., Radzi, A. I. N., Sawani, Y., & Rahmat, M. (2022). Examining the effectiveness of video competition among Malaysian and Indonesian accounting undergraduates in advancing the Sustainable Development Goals. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 12(2), 590 – 607.
- Kairi, N. I., Jamaludin, N., & Ridzuan, N. D. M. (2024). Competition-Based Learning in Science Camp to Stimulate Upper Secondary School Students' Motivation in Learning STEM. *Sains Humanika*, 16(2). <https://doi.org/10.11113/sh.v16n2.2137>
- Kaplánová, A. (2024). Psychological readiness of football players for the match and its connection with self-esteem and competitive anxiety. *Heliyon*, 10(6).1–9.e28599. <https://doi.org/10.1016/j.heliyon.2024.e28599>.

- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice-Hall.
- Lachebo, G. C., Thuo, M. W., Labiso, T. O., & Demissie, E. B. (2024). Students' readiness to participate in science project competitions: Views from secondary schools in Southern Ethiopia. *Social Sciences & Humanities Open*, 10, 101033.
- Leal Filho, W., Salvia, A. L., Lütz, J. M., Brandli, L. L., & Pretorius, R. W. (2019). Universities as living labs for sustainable development: Supporting the implementation of the sustainable development goals. *Sustainability*, 11(22), Article 5433. <https://doi.org/10.3390/su11225433>.
- Lei, J. H., Guo, Y. J., Chen, Z., Qiu, Y. Y., Gong, G. Z., & He, Y. (2016). Problem/case-based learning with competition introduced in severe infection education: an exploratory study. *SpringerPlus*, 5(1), 1821-1828.
- Liu, Y. J., Zhou, Y. G., Li, Q. L., & Ye, X. D. (2022). Impact study of the learning effects and motivation of competitive modes in gamified learning. *Sustainability*, 14(11), 6626.
- Lozano, R., Merrill, M. Y., Sammalisto, K., Ceulemans, K., & Lozano, F. J. (2017). Connecting competences and pedagogical approaches for sustainable development in higher education: A literature review and framework proposal. *Sustainability*, 9(10), Article 1889. <https://doi.org/10.3390/su9101889>.
- McGuire, M. (2025). Impact of competition-based learning on student engagement and performance. *International Journal of Construction Education and Research*, 21(E-pub ahead of print), 1-30. <https://doi.org/10.1080/15578771.2025.2512348>
- Murray, A. (2019). Competition as a teaching strategy. *BU Journal of Graduate Studies in Education*, 11(1), 13-16.
- Nguyen, H. B. N., Hong, J. C., Chen, M. L., Ye, J. N., & Tsai, C. R. (2021). Relationship between students' hands-on making self-efficacy, perceived value, cooperative attitude, and competition preparedness in joining an iSTEAM contest. *Research in Science & Technological Education*, 41(1), 251-27. <https://doi.org/10.1080/02635143.2021.1895100>.
- Nunnally, J. C. (1978). *Psychometric Theory* (2nd ed.). New York: McGraw-Hill.
- Nurunnabi, A. S. M., Rahim, R., Alo, D., Mamun, A. A., Kaiser, A. M., Mohammad, T., & Sultana, F. (2022). Experiential learning in clinical education is guided by Kolb's experiential learning theory. *International Journal of Human and Health Sciences (IJHHS)*, 6(2), 155-160.
- Oh, Z. J., Teoh, C. K., Hing, K., Sarip, F. M., Zainal, M. E., Zainol, M. N., S. M. N., Prunan, S., & Tan, W. C. (2025). Fostering entrepreneurial skills through community-industry collaboration in vocational education: A case study of the business pitching competition, 15(2), 292-303.
- Pitch to the Pack. (n.d.). *Judging criteria*. <https://pitchtothepack.textiles.ncsu.edu/judging/>.
- Radzi, A. I. N., Drahman, D. N. A., Joseph, C., Rahmat, M., & Suria, K. (2020). Competition-based learning strategy of the online Introductory Accounting quiz for non-accounting majors. *International Business Education Journal*, 13(1), 83-94.
- Rasmussen, E. A., & Sørheim, R. (2006). Action-based entrepreneurship education. *Technovation*, 26(2), 185-194.
- Rideout, E. C., & Gray, D. O. (2013). Does entrepreneurship education really work? A review and methodological critique of the empirical literature on the effects of university-based entrepreneurship education. *Journal of Small Business Management*, 51(3), 329-351.
- Saari, U. A., Aagaard, A., Achtenhagen, L., & Mäkinen, S. J. (2025). Framing entrepreneurial ideas for sustainability: How do purpose-driven startups include the Sustainable Development Goals in their pitches? *E Business Strategy and the Environment*. 34(3), 3796-3826.
- Sekaran, U., & Bougie, R. (2016). *Research Methods for business: A building approach*. John Wiley & Sons.
- SparkHub Youth. (2024). *Pitch round criteria*. <https://www.sparkhubyouth.org/pitch-round-criteria>.
- Smith, D., Muldoon, J., & Lakshmikanth, G. S. (2022). The need for modification: The impact of COVID-19 on pitch competitions. *Entrepreneurship Education and Pedagogy*, 5(4), 686-702.
- Tembrevilla, G., Phillion, A., & Zeadin, M. (2024). Experiential learning in engineering education: A systematic literature review. *Journal of Engineering Education*, 113(1), 195-218.
- UNESCO. (n.d.). *IGEN::MY SDG ACTION REEL* competition. https://worldengineeringday.net/listing/igen-my-sdg-action-reel-competition/?utm_source=chatgpt.com.
- UNITAR. (2023). *ASEAN sustainable future leaders case competition*. https://www.unitar.my/asean-future-sustainable-leaders-afsl/?utm_source=chatgpt.com

- Usman, H., Djaha, Z. A., & Tuati, N. F. (2024). Application of the project-based learning model in improving creativity and entrepreneurial skills for independent entrepreneur students at the Kupang Negeri Polytechnic Campus. *International Journal of Current Science Research and Review*. 7(2) <https://doi.org/10.47191/ijcsrr/v7-i2-09>.
- Van Hanh, N. (2020). The real value of an experiential learning project through a contest in an engineering design course: A descriptive study of students' perspectives. *International Journal of Mechanical Engineering Education*, 48(3), 221-240
- Walter, S. G., Parboteeah, K. P., & Walter, A. (2013). University departments and self-employment intentions of business students: A cross-level analysis. *Entrepreneurship theory and practice*, 37(2), 175-200.
- Wan, C. D., & Abdullah, D. (2021). Internationalisation of Malaysian higher education: policies, practices and the SDGs. *International Journal of Comparative Education and Development*, 23(3), 212-226.
- Wijnen-Meijer, M., Brandhuber, T., Schneider, A., & Berberat, P. O. (2022). Implementing Kolb's Experiential Learning Cycle by Linking Real Experience, Case-Based Discussion, and Simulation. *Journal of Medical Education and Curricular Development*, 9(5), 1-7. <https://doi.org/10.1177/23821205221091511>
- Wu, L., Purwaningrum, E. K., Ho, Y. M., Prihadi, K. D., Cheng, C., & Qian, K. (2025). Students' competitiveness: motivation or fear?. *Journal of Education and Learning (EduLearn)*, 19(2), 864-871.
- Žalėnienė, I., & Pereira, P. (2021). Higher education for sustainability: A global perspective. *Geography and Sustainability*, 2(2), 99-106.