

Student Academic Performance Through Innovative Assessment in Teaching ENT 600: A Case Study of Pride Showcase in UiTMCTKKT

Syahrul Hezrin Mahmud¹, Najdah Abd Aziz^{1*}, Noorul Huda Zakaria¹

¹ Faculty of Business and Management, UiTM Cawangan Terengganu Kampus Kuala Terengganu, 21080, Kuala Terengganu, Terengganu, Malaysia

*Corresponding Author: najda329@uitm.edu.my

Received: 29 January 2026 | Accepted: 8 March 2026 | Published: 1 April 2026

DOI: <https://doi.org/10.55057/ijares.2026.8.2.31>

Abstract: *Entrepreneurship courses are aggressively promoted in Malaysian education. It is an effort made by the government and educational institutions to develop entrepreneurial knowledge, skills, and attitudes among students at all levels of education. This is in line with the government's goal to produce job creators rather than job seekers, support economic growth, and reduce graduate unemployment. Based on traditional method, assessment focusing more on memorization, test and exam, it is not accurately reflecting a student's understanding or critical thinking skills. Hence, this study aims to assess the academic achievement of students through innovative assessment in teaching ENT 600, UiTM Cawangan Terengganu Kampus Kuala Terengganu. 103 students of ENT600 courses UiTMCTKKT (Mac – Aug 2025 session) from four bachelor programmes involved in this study. Data was analysed via frequency table, represented percentage and quantity of response. Then elaboration of each table is done to ensure a clearer understanding. Findings show that students are satisfied with the smoothness of Pride Showcase program in terms of objective, juries, etc. This program also improved their entrepreneurship knowledge, skills, and experience and equipped them to become entrepreneurs in future. Besides, they are very confident in sharing entrepreneurial knowledge and helping friends prepare the project in this course. As a conclusion, Pride Showcase program very beneficial to students and has successfully attracted students' attention towards entrepreneurship, in line with achieving the government's overall goals and the universities' specific objectives.*

Keywords: Academic Performance, Innovative Assessment, Entrepreneurship, Frequency Table

1. Introduction

Entrepreneurship, as a career alternative, holds immense potential for driving economic growth and addressing society's most pressing challenges (Looi & Maritz, 2021). Its significance in fuelling innovation and job creation is widely acknowledged (Kowang et al., 2021). The Malaysian government nowadays has actively promoted entrepreneurship among university graduates, shedding light on its commitment to investing in entrepreneurship through training programs and initiatives. This is to ensure graduates who have received entrepreneurial education officially or informally have a high potential of becoming entrepreneurs (Sulaiman et al., 2024)

The MARA Technological University or the MARA University of Technology (Universiti Teknologi MARA) is a public university in Malaysia, based primarily in Shah Alam, Selangor. It was established to help rural Malays in 1956 as the RIDA (Rural & Industrial Development Authority) Training Centre (Dewan Latihan RIDA) and opened with around 50 students. It has since grown into the largest institution of higher education in Malaysia as measured by physical infrastructure, faculty and staff, and student enrolment. Since becoming a public university despite its name, UiTM is no longer affiliated with Majlis Amanah Rakyat.

Today, Universiti Teknologi MARA (UiTM) is the largest comprehensive university in Malaysia, providing innovative education with state-of-the-art infrastructure and technology within reach at its 34 campuses, 24 faculties, and 7 academic centres across the country. UiTM offers over 500 academic programmes at Foundation, Pre-Diploma, Diploma, Bachelor's, Master's, and PhD levels, as well as Professional Programmes. It continues to expand access to higher education, playing a crucial role in nation-building by unleashing potentials and shaping the future. One of the UiTM educational objectives (UO) is aimed to produce graduates who are talented, possessing competencies that include knowledge, practical skills, and an attitude to meet the needs of the changing world of work. Thus, UiTM provide a lot of marketable courses and one of them is ENT 600 to ensure this objective achieved.

Technology Entrepreneurship (ENT600) is one of the courses that offered by UiTM to bachelor's degree students from science and technology cluster. In this course, students will be exposed to entrepreneurship and apply their entrepreneurial skills in developing an advanced technology that could be a basis for the creation and development of a technology-based venture. The course delivery combines both theoretical and practical aspects of technology entrepreneurship. Theoretical aspect is looking at the important elements in understanding technology entrepreneurship, while practical aspect is engaging the students to develop their technology-based idea business blueprint. Thus, students will learn a lot of technology entrepreneurs (technopreneurs) aspects in this course such as how to create creative and innovative ideas, new product development processes, build prototype and how to commercialize it. Students also learn the process of preparing technology venture blueprints which are important in their proposed business and convince financial institutions in applying for loans.

After completing this course, students can demonstrate managerial and entrepreneurial skills in identifying technology-based business opportunities. This is important in preparing themselves to become competing entrepreneurs in producing or developing innovative products. Thus, this study aims to assesses the academic achievement of students through innovative assessment in teaching ENT 600, UiTM Cawangan Terengganu Kampus Kuala Terengganu.

Problem Statement

Traditional assessment methods, such as standardized tests and written exams, have long been the cornerstone of educational evaluation. However, these methods often fall short in capturing the full spectrum of a student's abilities. They primarily focus on memorization and the ability to perform under pressure, which may not accurately reflect a student's understanding or critical thinking skills. Moreover, traditional tests can create a high-stress environment, leading to anxiety and performance issues. Based on the study, female students were found to have higher levels of test anxiety compared to male students (Yarkwah and Gbormittah, 2024). There have a few factors that contribute to this issue such as gender, ethnicity, frequency of parental communication, and clinical manifestations of deviant personality traits (Xing et al.,

2024). This pressure often discourages creativity and deep learning, as students may focus on rote learning to pass exams rather than genuinely engaging with the material.

With the growing recognition of diverse learning styles and the importance of 21st-century skills, educators are increasingly looking for assessment methods that go beyond traditional testing. Innovative assessment approaches aim to provide a more holistic view of student learning, encouraging critical thinking, creativity, collaboration, and real-world problem-solving. These new methods are designed to be more inclusive, catering to different types of learners and allowing students to demonstrate their knowledge and skills in various ways. By moving beyond traditional testing, educators can better support student growth and development, preparing them for the complexities of the modern world.

2. Literature Review

Student Academic Performance

Academic performance is the term that indicates a student's achievement after completing a course or subject from an institution. It measures students' learning across various academic subjects, which is assessed by formative and summative assessments. Academic performance refers to the knowledge, skills, and abilities acquired by learners in a specific subject or academic field. It is determined through the assessment, evaluation, and judgment of learners' progress over a defined period (Bordbar et al., 2025). In a cross-sectional study in Malaysia reported that an increasing number of students in higher education institutions still do not graduate on time, indicating that they have not performed well in their studies (Ab Razak et al., 2019).

There are a few approaches in measuring student academic performance. Grade point average (GPA) is a commonly used indicator for measuring academic performance (Marin et al., 2025). The highest grade represents the highest performance. Papadogiannis et al. (2023) use statistical and regression techniques in interpret students' behaviour and performance on historical records.

Innovative Assessment

Assessment is integral to quality teaching and learning, which is fundamental to higher education (HE). In recent years, and particularly over the last two decades, there has been a substantial rethinking of assessment in HE, with calls for a significant, evidenced-informed repositioning of assessment processes and practices (Harrison et al., 2022). Traditional assessments, such as essays or traditional exams, may be considered by students as arbitrary and irrelevant, and simply test their ability to memorise material, or marshal facts and details leading to ineffective learning, while the activities associated with traditional assessments can consist of 'routine, dull artificial behaviour'. There is evidence that students feel alternative assessment approaches to be fairer, and more useful, as they measure qualities, skills and competencies which 'would be valuable in contexts other than the immediate context of assessment'. Guha and Roy (2025) highlight those alternative assessments, such as portfolios, project-based tasks, and peer assessments, promote deeper learning by encouraging critical thinking, creativity, and realworld problem-solving skills. These assessments foster student-centered learning, enhance engagement, and accommodate diverse learning styles.

A study by Dean et al. (2025) suggests that implementing innovative assessment approaches across a curriculum more widely will increase student familiarity and confidence with these assessment types. Students also understood the requirements of the assessment and would

appreciate the ‘learning through doing’ approach in which the students were encouraged to find their own answers rather than just being told the answers in a more didactic traditional lecture approach. Besides, carefully designed innovative assessments can integrate skills development into the learning and assessment process, and assessing and teaching them alongside ‘subject knowledge’. Thus, innovative assessments can be designed not only to assess what a student ‘knows’ but also what a student ‘can do’ with that knowledge, and how it can be applied in the real-world.

El Sleemi et al. (2025) stated that the encouragement should be given to students to showcase their innovative products and the regular organization of innovation exhibitions. The students exhibit higher levels of critical and creative thinking and benefit more from educational environments that promote innovation and support the development of higher-order thinking skills.

Pride Showcase

In ENT600 course, students’ academic performance will assess through several methods such as article review, case study, academic test and presentation. Thus, Pride Showcase is held to provide students with a space to present their proposed businesses and the prototypes they have developed. The Pride Showcase (Product Idea Innovation Competition) is a flagship annual program that began in 2018, organized under the Technology Entrepreneurship (ENT600) course at Universiti Teknologi MARA (UiTM) Cawangan Terengganu. Now proudly in its 12th edition, the program continues to be a key platform for promoting innovation, creativity, and entrepreneurial thinking among undergraduate students. Significantly, Pride Showcase is jointly organized by the ENT600 subject committee and MASMED (Malaysian Academy of SME & Entrepreneurship Development) UiTMCTKKT. This collaboration reflects a strong institutional commitment to developing future-ready, entrepreneurial graduates equipped with the knowledge, mindset, and skills to succeed in competitive environments.

Unlike conventional classroom-based assessments, Pride Showcase is specifically designed to elevate the standard of student evaluation. Instead of presenting solely in front of peers or instructors, students are challenged to present their ideas in a public, exhibition-style format, judged by external panels comprising lecturers from various disciplines and, in some cases, industry representatives. This format encourages a higher level of preparation, professionalism, and confidence as key traits for future entrepreneurs.

As part of their coursework, students are tasked with creating and presenting innovative product or business ideas through presentations, posters, prototypes, and business model canvases. These projects are evaluated by panels comprising lecturers and industry professionals, ensuring academic rigor and market relevance. Beyond academic outcomes, the program fosters essential soft skills such as communication, teamwork, problem-solving, and critical thinking. The Pride Showcase serves not only as a course assessment tool but also as a launchpad for young entrepreneurs and changemakers eager to turn ideas into impactful solutions.

3. Methodology of Research

103 students of ENT600 UiTMKKT (Mac – Aug 2025 session) involved in this study. Students are from 4 programmes which are:

- CS/CDCS230 Bachelor of Computer Science (Honors)
- CS/CDCS 267 Bachelor of Science Mathematical Modelling and Analytic (Honors)

- CS/CDCS264 Bachelor of Information Systems Business Computing (Honors)
- CS/CDCS270 Bachelor in Computer Science (Mobile Computing) (Honors)

Purposive sampling was used as it involves selecting participants who meet specific, predefined criteria directly related to the research objectives (Edmonds & Kennedy, 2017). In other words, units are selected “on purpose” in purposive sampling. This method is particularly effective when researchers need a well-defined group of participants who share characteristics that are central to the study (Mumtaz et al., 2025)

In data collection process, both sources which is primary data and secondary data was applied. A set of questionnaires adapted from Industry, Community and Alumni Network (ICAN) UiTM (ican@uitm.edu.my) and 5-point Likert Scale questions was developed related to the Pride Showcase assessment and ENT600 course itself. Data was analysed via frequency table, represented percentage and quantity of response. Then elaboration of each table is done ensure a clearer understanding.

4. Result and Findings

Demographic Data

Table 1: Respondent Background

	Gender	%
Male	52	50.5
Female	51	49.5
TOTAL	103	100

Table 1 above shows most of the respondents involved in this study were male students 50.5% and the remaining 49.5% were female students.

Table 2: Programmed of Students

Program	Frequency	%
CS/CDCS230	40	38.8
CS/CDCS270	1	1.0
CS/CDCS264	60	58.3
CS/CDCS267	2	1.9
TOTAL	103	100

Table 2 shows the program of the respondents in this study. Most of the respondents are from CS/CDCS264, which is a total of 60 students. Meanwhile, only 1 student from CS/CDCS270 were involved in this study.

Students' Evaluation Towards Pride Showcase

Table 3: Students' Evaluation towards Pride Showcase

QUESTIONS	Very satisfied	Satisfied	Not sure	Dissatisfied	Very dissatisfied
Q1 Appropriateness of program objectives	50.5%	48.5%	1%	0%	0%
Q2 Contents of the program	45.6%	53.4%	1%	0%	0%
Q3 Smooth running of the program	49.5%	49.5%	1%	0%	0%

Q4 Expertise of the jury in evaluating student projects	37.9%	49.5%	10.7%	1.9%	0%
Q5 The effectiveness of the implemented program	45.6%	52.4%	2%	0%	0%
Q6 Overall program evaluation	43.7%	55.3%	1%	0%	0%

Table 3 showed that the evaluation by the students towards Pride Showcase program. Most of students very satisfied on the appropriateness of the Pride Showcase objectives. 53.4% of them satisfied with the content of Pride Showcase program. They also very satisfied for the smoothness of the program and satisfied with the expertise of jury in evaluating the students’ project in the program. 52.4% of students satisfied with the effectiveness of the program implemented and as overall they were satisfied with the Pride Showcase program.

Students’ Perception Towards Ent600 Course.

Table 4: Students’ Evaluation Before and After Pride Showcase

QUESTIONS	Before Pride Showcase Program					After Pride Showcase Program		
	Strongly agree	Agree	Not sure	Disagree	Strongly disagree	Strongly agree	Agree	Not sure
Q1 I am interested in the ENT600 course.	27.2%	41.7%	24.3%	5.8%	1%	46.6%	52.4%	1%
Q2 I have knowledge of the ENT600 course	21.4%	35.9%	22.3%	16.5%	3.9%	38.8%	61.2%	0%
Q3 I can use the knowledge/skills I have learned in preparing an ENT600 project	23.2%	34%	24.3%	17.5%	1%	42.7%	56.3%	0%
Q4 I can share knowledge/skills in preparing ENT600 projects with friends or others.	24.2%	31.1%	23.3%	17.5%	3.9%	41.7%	57.3%	0%
Q5 The ENT600 course improved my skills in producing technology-based innovative products.	23.2%	33.3%	30.4%	11.6%	1.5%	43.7%	55.3%	1%
Q6 The ENT600 course helped me to be a successful entrepreneur.	25.2%	33.0%	30.1%	10.7%	1%	41.7%	56.3%	1.9%

The results indicate a significant positive impact of the Pride Showcase program on students’ perceptions, interest, and self-assessed competencies related to the ENT600 course. A comparison between Before and After Pride Showcase program responses shows consistent improvements across all six measured items (Q1–Q6).

Across all questions, there is a substantial increase in the combined percentage of “Strongly Agree” and “Agree” responses after the Pride Showcase program. At the same time, responses of “Not sure,” “Disagree,” and “Strongly disagree” decreased markedly, in many cases dropping to 0–1%. This suggests that the program successfully strengthened students’ confidence, understanding, and positive attitudes toward ENT600.

5. Conclusion

This study presents data on student academic performance through innovative assessment, Pride Showcase which is one of the evaluation tools in teaching ENT600 course. As entrepreneurship has developed significantly over the years in Malaysia, thus this type of assessment is important in preparing students with digital entrepreneurship knowledge and skills in whatever business they involved. Students' emotions towards embarking on entrepreneurial endeavours were positive, and therefore, they would be more eager to carry out entrepreneurial activities. Such as discovering opportunities, developing a business plan and strategy, obtaining money, allocating resources efficiently, organising and testing the product or service, and putting up a physical store or an online store (Nor Hafiza et al., 2023). By adopting these strategies, universities can better prepare students to thrive as entrepreneurs, equipped with the necessary skills, knowledge, and support to succeed in the competitive business world. From the data above, it shows that students gain many benefits from Pride Showcase program and they were satisfied of the content and context of that program.

Acknowledgements

The authors would like to thank UiTMCTKKT for supporting the researcher in conducting this project. Also thank you for the cooperation and commitment given by all members, lecturers and all parties involved in making this project successful.

Conflict of Interest Statement

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

References

- Ab Razak, W.M.W, Baharom, S.A.S., Abdullah, Z., Hamdan, H., Abd Aziz, N.U, Anuar, A.I.M. (2019). Academic performance of university students: A case in a higher learning institution. *KnE Soc Sci.*, 3(13), 1294–304.
- Bordbar, S., Mirzaei, S., Bahmaei, J. et al. (2025). Predicting students' academic performance based on academic identity, academic excitement, and academic enthusiasm: Evidence from a cross-sectional study in a developing country. *BMC Med Educ*, 25, 768 (2025). <https://doi.org/10.1186/s12909-025-07374-6>
- Dean, A. P., Redfern, J., & Shaw, K. J. (2025). Student attitudes to, and achievement, in an innovative and authentic biotechnology assessment based on a 'consultancy Response to Tender.' *Journal of Biological Education*, 1–16. <https://doi.org/10.1080/00219266.2025.2450301>
- Edmonds, W. A., & Kennedy, T. D. (2017). *An Applied Guide to Research Designs Quantitative, Qualitative, and Mixed Methods* (2nd ed.). Sage Publications.
- El Sleemi, M., Al Jughaiman, A. & Al Fawzan, S. (2025). Student perceptions of innovation indicators in general education: insights for enhancing knowledge and practice. *Front. Educ.* 10, 1502771. doi: 10.3389/educ.2025.1502771.
- Guha, A., & Roy, B. (2025). Benefits and challenges of alternative assessment methods in higher education. *International Journal of Social Impact*, 10(1), 115-123. DIP: 18.02.009/20251001, DOI: 10.25215/2455/1001009.
- Harrison, R., L. Meyer, P. Rawstone, H. Razee, U. Chitkara, S. Mears, & C. Balasooriya. (2022). Evaluating and enhancing quality in higher education teaching practice: A meta-review. *Studies in Higher Education*, 47(1), 80–96. <https://doi.org/10.1080/03075079.2020.1730315>

- Kowang, T. O., Apandi, S. Z., Hee, O. C., Fei, G. C., Saadon, M. S., & Othman, M. R. (2021). Undergraduates entrepreneurial intention: Holistic determinants matter. *International Journal of Evaluation and Research in Education (IJERE)*, 10(1), 57-64.
- Looi, K. H., & Maritz, A. (2021). Government institutions, entrepreneurship education and entrepreneurship education programmes in Malaysia. *Education + Training*, 63(2), 271-291.
- Marín, Y.R., Huatangari, L.Q., Tuesta, J.N.A. *et al.* (2025). Analysis of factors affecting the academic performance of university students using machine learning. *Sci Rep*, 15, 44027 (2025). <https://doi.org/10.1038/s41598-025-28870-1>.
- Mumtaz, A. M., Ramayah, T., Hiram, T., Jun-Hwa C. (2025). Purposive sampling: A review and guidelines for quantitative research. *Journal of Applied Structural Equation Modelling*, 9(1), 01-23. DOI: 10.47263/JASEM.9(1)01.
- Nor Hafiza, O., Zaminor, Z. Z., Nor Asma, A. (2023). Impact of entrepreneurship education on entrepreneurial emotions among university students. *International Journal of Learning, Teaching and Educational Research*, 22(5), 605-619. <https://doi.org/10.26803/ijlter.22.5.31>.
- Papadogiannis, I. *et al.* (2023). First grade GPA as a predictor of later academic performance in High School. *Knowledge*, 3(3), 513524, <https://doi.org/10.3390/knowledge3030033>.
- Sulaiman, S., Yusof, N.L.M. & Amaran, M.A. (2024). State of entrepreneurship education in Malaysia: a comparison of entrepreneurship programs in public universities in Malaysia to international practice. *Journal of Economics and Sustainability*, 6(2), 84-103. <https://doi.org/10.32890/jes2024.6.2.5>.
- Xing, X.Y., Wang, G.M., Li, Y., Zhang, W.X., & Shen, X.D. (2024). Current status and influencing factors of test anxiety of senior one students in Yanji, China: A cross-sectional study. *Front Psychol.*, 15,1414215. doi: 10.3389/fpsyg.2024.1414215. PMID: 39108436; PMCID: PMC11302047.
- Yarkwah, C., Kpotosu, C.K. & Gbormittah, D. (2024). Effect of test anxiety on students' academic performance in mathematics at the senior high school level. *Discov Educ*, 3, 245 (2024). <https://doi.org/10.1007/s44217-024-00343-z>.