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DELIVERA (DELIVERY AND ASSESSMENT MODEL): THE IMPACTS OF COLLABORATIVE TEACHING ON STUDENTS

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ABSTRACT

Collaboration has been shown to enhance student learning and engagement, yet interdisciplinary collaborative teaching remains underexplored. This study investigates how collaborative delivery and assessment in two subjects, i.e., Islamic Consumer Behavior (IMU253) and Fundamentals of Entrepreneurship (ENT300), promote practical knowledge and application among students. Grounded in Synergistic Integration Theory (SIT), this research examines the effects of DELIVERA (Delivery and Assessment Model) collaborative teaching on course learning and application. Mid-semester, an international speaker was invited to deliver insights on the halal market that catered to both subjects' requirements. At the end of the semester, students were required to submit a video presentation integrating both subjects' learning outcomes and demonstrating a Shari'ah-compliant business idea. Lecturers assessed the videos using distinct rubrics aligned with each course's objectives. This quantitative study surveyed 97 students from the March 2024 semester. Findings revealed that 88.6% of students found the international guest speaker beneficial in enhancing their understanding of the halal market, while 92.8% reported they could effectively apply knowledge from both subjects in their assignments. The results highlight the value of collaborative teaching in bridging theoretical learning with real-world application, particularly in Islamic-based and entrepreneurial education. The study recommends broader adoption of collaborative delivery and assessment models in higher education. Future research should explore its impact on students' long-term memory, critical thinking, and cross-disciplinary problem-solving skills.

Keywords: Collaborative Teaching, Collaborative Delivery, Collaborative Assessment, Interdisciplinary, Higher Education

INTRODUCTION

Collaborative teaching for interdisciplinary subjects is increasingly recognized as an effective pedagogical strategy to enhance student learning outcomes. It offers emotional, social, and cognitive benefits by fostering student engagement and creating meaningful learning experiences. Through continuous interaction and shared responsibility, collaborative teaching boosts participation and motivation (Yan, Zuo, & Luo, 2024). Co-teaching and team teaching have also been linked to higher academic achievement and satisfaction, especially in applied learning contexts (Saeed, Mutashar, & Aldakheel, 2018). In the context of sustainability and real-world problem-solving, interdisciplinary methodologies have been found to promote critical reflection and cooperative skills, thereby enriching the overall learning environment (Berasategi et al., 2020). Similarly, nursing education research has demonstrated that interdisciplinary teaching can significantly improve communication, trust, and team dynamics while reducing relational conflicts, compared to traditional instruction methods (Liu, 2021).

The strength of interdisciplinary learning lies in its ability to help students develop a holistic and practical understanding of complex topics (Hajiyeva, 2024). Integrative teaching enables students to explore issues from multiple perspectives, enhancing engagement and academic success (Moser, Ivy, & Hopper, 2019). It also supports a positive learning environment where students feel safe to take intellectual risks (Baumfield & McLaughlin, 2006). Despite these advantages, interdisciplinary collaborative teaching is underexplored in Islamic-based education, particularly where ethical, spiritual, and entrepreneurial values intersect. This study applies Synergistic Integration Theory (SIT) (Hutchins, 1995), which posits that purposeful collaboration across disciplines generates learning greater than the sum of its parts. SIT underpins the DELIVERA model introduced in this study, which integrates delivery, such as one international speaker for both IMU253 and ENT300, and assessment via one video submission evaluated by both courses. This research investigates the impact of collaborative delivery and assessment strategies in IMU253 and ENT300 at UiTM Terengganu, with a focus on students' perceptions of interdisciplinary learning in an Islamic higher education context.

METHODS

This study implemented an interdisciplinary collaborative teaching approach involving two lecturers co-teaching Islamic Consumer Behaviour (IMU253) and Fundamentals of Entrepreneurship (ENT300). The collaboration included jointly designing the scheme of work, delivering lessons, and assessing students' final business pitching videos. The teaching strategy incorporated two integrated models: delivery and assessment. For the delivery model, an international guest speaker was invited to present a lecture titled "Cracking the Code: Deciphering Islamic Consumer Behaviour in the Halal Market." This session was aligned with the course learning outcomes of both subjects and provided students with global perspectives on halal market practices.

For the assessment model, students produced a group pitching video that addressed requirements from both subjects. Although the video was a single submission, it was assessed using two distinct rubrics to reflect the unique objectives of each course. This model encouraged students to apply integrated knowledge from IMU253 and ENT300, fostering a deeper interdisciplinary understanding. They were

expected to demonstrate the ability to design a Shari'ah-compliant business model by synthesising concepts from both disciplines.

The assignment followed a project-based learning approach, specifically in the form of business planning. This collaborative teaching method was applied to IC110 (Diploma in Muamalat) students, where IMU253 is a programme-specific subject and ENT300 is a university-wide course. At UiTM, collaborative teaching initiatives are currently supported through Collaborative Groups (CG) under the Centre for Innovative Delivery and Learning Development (CIDL, 2023). This study employed a quantitative research design using a structured questionnaire. The instrument was distributed via Google Form to 97 Semester 4 Diploma in Muamalat students enrolled in both IMU253 and ENT300 at UiTM Cawangan Terengganu.

RESULTS AND DISCUSSION

All 97 respondents selected answered the survey. They were coming from four classes. All of them have been This experience provides exposure to collaborative teaching and learning. Out of 97 students, almost 97% admitted that it was their first experience doing two related assignments for two different subjects.

The first part of the survey evaluated students' perceptions of an international collaborative teaching webinar on Islamic Consumer Behavior. Using descriptive analysis with frequency and percentage, responses were gathered from 97 students using a 5-point Likert scale. Overall, students responded positively. For Question 1, 90.7% agreed or strongly agreed that the international speaker's session was beneficial. In Question 2, 86.6% agreed the webinar offered new perspectives, particularly from Indonesia. Question 3 revealed that 91.7% of students viewed the webinar as opening a new learning horizon. Question 4, which asked about the value of inviting guest speakers, had the highest combined agreement at 90.7%, with 47.4% strongly agreeing. Question 5 showed that 88.6% felt they learned effectively about the halal market from the speaker. Neutral responses ranged between 7.2% and 12.4%, while disagreement remained low at under 2.1%.

These findings highlight the effectiveness of international collaborative teaching in enhancing engagement and comprehension. Students valued the guest lecture format and gained global insights into Islamic consumer behavior (Appiah-Kubi & Annan, 2020). High agreement on international exposure and interdisciplinary learning (Q2, Q3) reflects the success of this model in promoting intercultural understanding (Berasategi et al., 2020; Hajiyeva, 2024). Strong support for guest speakers (Q4) affirms their pedagogical value (Liu, 2021), while the ability to relate theory to practice, especially halal market applications (Q5), supports experiential learning (Saeed et al., 2018).

These outcomes reinforce Synergistic Integration Theory (SIT), which suggests intentional collaboration across disciplines promotes more profound understanding. The DELIVERA model enabled such integration by linking IMU253 and ENT300 in both teaching and assessment. This supports literature promoting collaborative teaching to improve knowledge retention, critical thinking, and real-world application. Institutions should consider adopting similar delivery models, especially for culturally contextual subjects like Islamic consumer behavior and entrepreneurship.

The second part of the survey examined students’ perceptions of the collaborative assessment model, in which students completed a single business pitching video to fulfill outcomes for both subjects. Again, the data reflected strong approval. In Q1, 86.6% enjoyed working on one business idea for both subjects. Q2 showed that 95.9% believed submitting one video saved time, and this is supported by Wan Jusoh, Ghazi Ahmad, Ibrahim, and Nik Hassan (2025). Time management benefits were confirmed in Q3, with 90.7% agreeing. For Q4, 92.8% indicated they were able to apply what they learned in both subjects effectively.

Students also demonstrated strong agreement in terms of knowledge integration:

Q5: 88.6% saw clear relevancy between the two subjects.

Q6 & Q7: 91.8% felt they better understood both subjects.

Q8: 87.6% felt the assignment benefitted both subjects fully.

In Q9, 92.8% expressed satisfaction with the lecturers’ joint explanation of the business plan. Finally, Q10 showed that 86.6% would like this type of collaboration applied to other subjects. Disagreement levels across items were low (0–2%), with neutral responses between 3.1% and 13.4%. These findings further support the DELIVERA model’s impact and reinforce the value of collaborative assessment as a practical and efficient interdisciplinary learning approach. Full details are presented in Table 1 and Figure 1.

Table 1.: Findings of Collaborative Delivery and Collaborative Assessment

INTERNATIONAL COLLABORATIVE TEACHING WEBINAR						
No	Question	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	The international speaker on Islamic consumer behavior was beneficial.	0%	2.1%	7.2%	51.5%	39.2%
2	The webinar gave me new perspectives, especially from Indonesia.	0%	1%	12.4%	42.3%	44.3%
3	The webinar broadened my learning on Islamic consumer behavior.	0%	0%	8.2%	47.4%	44.3%

4	Guest speaker sessions are a good teaching practice.	1%	0%	8.2%	43.3%	47.4%
5	I learned effectively about the halal market from the guest speaker.	0%	1%	10.3%	41.2%	47.4%

COLLABORATIVE ASSESSMENT

No .	Question	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	I enjoyed doing IMU253 and ENT300 assignments using the same business idea.	0%	1%	12.4%	36.1%	50.5%
2	Submitting one video for both subjects saved time.	1%	0%	3.1%	25.8%	70.1%
3	These assignments helped me manage time better.	1%	1%	7.2%	40.2%	50.5%
4	I applied what I learned in both subjects to the assignments.	1%	1%	5.2%	28.9%	63.9%
5	The assignments showed the relevance between both subjects.	1%	0%	10.3%	38.1%	50.5%
6	The assignments helped me understand both subjects better.	1%	0%	7.2%	42.3%	49.5%
7	By doing these kind of assignments, I can understand both subjects effectively.	0%	0%	13.4%	42.3%	44.3%
8	The assignments benefitted both subjects fully.	0%	1%	11.3%	41.2%	46.4%
9	I'm satisfied with the business plan explanation by both lecturers.	0%	1%	6.2%	45.4%	47.4%
10	I'd like this type of subject collaboration used in other courses.	1%	1%	11.3%	41.2%	45.4%

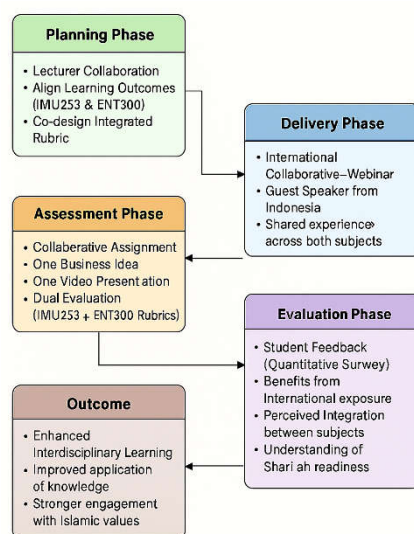


Figure 1.: “DELIVERA” Innovative Interdisciplinary Collaborative Teaching Model

CONCLUSION

The findings show that collaborative delivery, particularly through an international guest speaker, greatly enhanced student engagement, global perspective, and real-world application of knowledge. Likewise, the collaborative assessment model received strong approval, with students reporting better time management, clearer understanding, and the ability to apply integrated knowledge effectively. These results highlight that well-designed interdisciplinary collaboration can be a powerful tool to improve applied learning, link theory to practice, and develop holistic thinking. Integrating content from different disciplines also nurtures students’ ability to connect Islamic values with entrepreneurship, aligning well with the goals of the Muamalat curriculum.

The study supports Synergistic Integration Theory (SIT), which suggests that intentional collaboration fosters deeper learning. The DELIVERA model helped students meaningfully connect IMU253 and ENT300, linking knowledge with practice. The implications point to the importance of institutionalising collaborative teaching strategies in higher education. Success depends on clear rubrics, strong lecturer coordination, and curriculum support. Future research should explore the long-term impact on students’ critical thinking, memory retention, and readiness for real-world challenges, especially in Islamic-based interdisciplinary programs.

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