



The Case Method as a Strategy to Enhance Teaching Effectiveness in University Classrooms

Jessica Zumarraga-Avila¹, Lizbeth Zumarraga-Avila²

¹Autonomous University of Yucatan, Mexico

²Modelo University, Mexico

Abstract

The case method has traditionally been used in business, law and medical education. But it has also become a common and powerful teaching tool in many other academic fields. However, due to limited evidence, the effectiveness of case studies in fulfilling specific learning objectives remains a topic of discussion. This study aims to contribute to the discussion by examining the experiences of 24 faculty members from various disciplines at a private university in southeastern Mexico who collaboratively designed and implemented 12 original teaching cases tailored to their respective fields. Through semi-structured interviews, participant reflections, and analysis of the developed cases, data collected revealed how the case method fostered interdisciplinary collaboration, critical thinking, and practical application of theoretical knowledge. Findings suggested that the case method not only improved faculty members' pedagogical skills and confidence in active learning strategies but also led to unexpected outcomes, such as innovative, contextually relevant cases that bridged disciplinary silos and enhanced student engagement. Initial resistance to guideline uniformity across fields was a challenge, yet the process ultimately promoted professional growth and institutional teaching innovation. This study highlights the case method's potential as a scalable strategy for teacher professionalization in higher education and suggests implications for curriculum design and faculty training programs.

Keywords: Case method, case-based learning, faculty professionalization, higher education, teaching effectiveness.

1. Introduction

The case method is generally recognized as an effective teaching strategy in business, law, and medical training. However, there is limited evidence supporting its application in all fields of higher education (Rosier, 2022). Some studies suggest that case-based learning (CBL) is more effective than conventional teaching strategies because it enhances student engagement with learning processes, connects theory with practice, and fosters deeper understanding and critical thinking skills (Bonney, 2015; Delany et al., 2025; Mahdi et al., 2020; Varma et al., 2025).

Not only do students benefit from this strategy, but faculty do as well. Şen Akbulut & Hill (2022) and Ulvik et al. (2022) state that CBL encourages educators to transform from knowledge-transmitters to learning-facilitators. However, despite these advantages, the adoption of the case method beyond business, law and medicine remains limited, especially in social sciences, humanities, engineering, and education. This may be due to the predominant focus of research on student outcomes, with fewer studies exploring faculty experiences in developing and implementing cases, especially through interdisciplinary collaboration to create original, context-specific materials.

Higher education is undergoing a drastic transformation driven by the global and national trends and priorities (OECD, 2019), which have prompted universities to offer relevant education to their students. Yucatán, located in the southern of Mexico, has experienced an increasing migration of people from across the country. Consequently, private institutions have played a central role in serving these diverse student populations, whose presence provides rich material for case development. Unfortunately, as Villatoro et al. (2023) have suggested, faculty members frequently work in disciplinary silos, with limited structured opportunities for cross-disciplinary collaboration or professional development in innovative teaching methods.

The Modelo University (Unimodelo) is a private higher education institution with campuses in three cities: Mérida and Valladolid in the state of Yucatán, and Chetumal in the state of Quintana Roo. Unimodelo's educational approach is centered on human development, critical thinking, innovation, and social



responsibility. The University comprises specialized schools of business, law, design, humanities, health, architecture, and engineering, offering a total of 25 undergraduate programs and 14 graduate programs. With an enrollment of 3,200 students and 378 faculty members, Unimodelo seeks to prepare professionals to make significant contributions to society across the Yucatán Peninsula and beyond.

The present study is a big step forward for Unimodelo because it is the first time it has systematically documented the impact of encouraging faculty participation in a "Case Method" workshop not only to learn how to develop cases but to provoke interdisciplinary collaboration among members from different fields and schools. The objective was to analyze the impact of collaborative case development by faculty members from diverse disciplines on their professional growth and pedagogical transformation through three specific objectives:

1. Explore the experiences of the twenty-four faculty members who participated in the "Case Method" workshop and collaboratively designed cases.
2. Determine whether any teaching competencies were developed during the case method development process.
3. Identify the challenges faced during the process, the unexpected outcomes, and the potential for institutional adoption.

The findings indicate that the case method is a powerful vehicle for teacher professionalization, pedagogical innovation, and student engagement. They also demonstrate its potential for institutional application as a strategy to develop faculty teaching competencies and collaborative projects that transcend disciplinary boundaries.

3. Methodology

The study adopted a qualitative, interpretive approach grounded in constructivist paradigm, which facilitated an in-depth understanding of faculty experiences, with collective case-study design (Stake, 1995; Yin, 2018). The data-collection sources were: (a) Document analysis on the twelve cases using a seven-criteria-rubric: generalities, narrative, structure & organization, information & evidence, discussion engaging, composition, and excellence. (b) Semi-structured focus group interviews with participating faculty. The process unfolded in three phases: (1) Delivery of the "Case Method" workshop; (2) Collaborative case development. Faculty worked in interdisciplinary groups of two to four members; however, three faculty members whose areas of expertise were highly specialized chose to work individually. (3) Implementation of the cases.

3.1 Participants

Participation in the study was voluntary and encompassed two aspects: (a) the desire to engage in the "Case Method" workshop, and (b) the commitment to develop a case. All faculty from the seven schools at the Mérida campus were invited to participate. A total of twenty-seven people signed up to join the initiative, but twenty-four of them completed the whole process (see Table 1).

Table 1. *Participants by school and field of expertise*

School	Participants	Fields of expertise
Architecture	4	<ul style="list-style-type: none"> • Architecture (3) • Environment impact (1)
Law	4	<ul style="list-style-type: none"> • Ethics and Law (2) • Entrepreneurship (1) • Land use regulation (1)
Design	3	<ul style="list-style-type: none"> • Digital illustration and product design (2) • Neurodivergence (1)
Engineering	4	<ul style="list-style-type: none"> • Industrial Engineering (1) • Innovation (3)
Business	4	<ul style="list-style-type: none"> • Administration and Finance (2) • Business and Finance (2)
Health	5	<ul style="list-style-type: none"> • Sports medicine (2) • Clinical Nutrition (3)



4. Results

The results are presented in two sections. One shows the results of the three semi-structured focus groups interviews with the twenty-four faculty members. The other section shows the results of a systematic document analysis of the twelve cases.

4.1 Focus Groups Interviews

The focus groups interviews centered on seven main topics: motivation toward English, interdisciplinary collaboration, competency development, critical thinking, institutional follow-up, and artificial intelligence. The theme of collaborative networks also emerged in two of the focus groups. For better organization the results were grouped into three categories: (1) faculty workshop experience, (2) teaching competencies and interdisciplinary collaboration, and (3) challenges and suggestions.

(1) Faculty workshop experience

They described the workshop experience as highly positive, rewarding, and transformative. They repeatedly emphasized how challenging it was to take a course in English language and yet how fluid, safe, and structured the course was. The English language issue was initially perceived as a limitation, but then it was seen as a challenging motivator. As one faculty member shared: *"What I remember most was the language challenge... it was difficult at first, but everything just started flowing, and it was a very rewarding, surprising experience."* (Group 1). Another noted, *"It was my first experience at the university taking a training course in English... it felt like gaining the confidence to speak."* (Group 2).

The faculty also valued the supportive atmosphere created by the instructor. They appreciated how the workshop broke down the traditional isolation between schools, allowed them to "get to know faces" and discovered their previously unrecognized expertise among their colleagues.

(2) Teaching competencies and interdisciplinary collaboration

The collaborative case development process increased teaching competencies. Faculty placed greater emphasis on scaffolding different levels of thinking (recognize, apply, analyze, propose). *"It helped me distinguish the levels of depth in thinking we want students to reach"* (Group 2). They affirmed having developed more reflective and critical assessments, moving away from memorization exams and toward activities that require students to argue and defend their ideas. *"I no longer give multiple-choice exams. They are now 100% reflective... it's about whether they defended their idea, not whether they think differently"* (Group 2). Another competency that the faculty said they developed was paying greater attention to real-world context (social, economic, multidisciplinary). *"I want them to develop this ability and not just stick to what they see in books, but to generate critical analysis based on the context in which they are living"* (Group 3). Many faculty members reported implementing these new approaches in their courses during the semester following the workshop.

Similarly, interdisciplinary collaboration was another highly valued aspect. Faculty repeatedly expressed how valuable it was for them to "be forced" to work with colleagues from different fields. They said: *"It was such a diverse team... we approached it from the architectural perspective, the legal perspective, and the environmental engineering perspective... it was really cool."* (Group 1). Another mentioned: *"Although we share the same technical advisor, our areas of expertise are different; it helped me understand how others think... and we arrived at an interesting joint proposal."* (Group 3). Participants recognized that one of the greatest advantages of promoting interdisciplinary work is the possibility of developing richer and more contextualized cases, with broader, multifaceted perspectives and reduced bias. However, they also acknowledged scheduling difficulties, an initial preference for working with familiar colleagues, and occasional barriers related to disciplinary egos.

(3) Challenges and suggestions

The most prominent challenges participants identified were:

- The significant time required to design and implement case studies.
- Students' excessive reliance on artificial intelligence tools and reluctance to engage in deep analytical work.



- The lack of institutional follow-up or support after the workshop.

Participants also highlighted several positive, yet unexpected outcomes. These included increased confidence in using English in academic settings, strengthened networks between schools that led to new collaborative projects and a sense of professional renewal. Several faculty members also noted a powerful role model effect on their students. As one participant reflected: *"I could see... that I'm asking this of you, but I'm also making an effort as a teacher to do the same"* (Group 2). Faculty expressed enthusiasm to continue and expand the initiative and offered practical suggestions for scaling the project:

- A version 2.0 of the workshop that includes ongoing support during case implementation in classrooms.
- Creation of an institutional repository of teaching cases.
- Formal institutional incentives, such as academic credit, reduced teaching loads, or a points-based recognition system.
- Regular technical-pedagogical English courses tailored for faculty.
- Development of formal multidisciplinary projects with institutional follow-up and stronger links to industry, government, and the local community.

Some participants offered the following quotes in this regard: *"It would be great if we could have some kind of guidance or support... to help us bridge the gap, because we're ready to move to the next level"* (Group 2). Another suggested, *"If there's a model project... let a group be selected... and give them the assignment that they'll have a year to work on it"* (Group 3).

4.2. Document Analysis of Cases

The cases were analyzed using a seven-criteria rubric (generalities, narrative, structure & organization, information & evidence, discussion engaging, composition, and excellence), each criterion could be scored on a scale from 4 (proficient) to 1 (deficient) scale, yielding a maximum of 28 points; the total was converted to a 100-point scale. The rubric was designed in accordance with the guidelines employed in the Case Method workshop, and the template used to develop their own cases. This approach enabled the establishment of a standard against which cases could be evaluated.

The cases were rated from 57 to 93 out of 100 with an average rating of 77.5. Eight cases (66%) demonstrated proficiency, while three cases required substantial revision and improvement. Most cases (83%) exhibited strengths particularly in the structure & organization criterion showing a clear and logical structure with well-defined sections and coherent flow. It's worth noting that a 100% of cases were developed considering the local context issues of Yucatán such as beach land dispossession, neurodiversity in the classroom, child abuse, ethical dilemmas in outsourcing and financial decisions, among others. In addition to considering global issues in a local context, nine of the twelve cases (75%) were developed by interdisciplinary teams. These cases featured realistic narratives, strong integration of evidence and a successful effort to incorporate different analytical perspectives, with bilingual (English-Spanish) versions.

Furthermore, a review of the cases revealed common weaknesses. The most prevalent, identified in 92% of cases, was the lack of alignment among three primary components that ensure consistency across cases: the line of reasoning (inductive or deductive), the discussion questions, and the anticipated learning outcomes. The majority of discussion questions had a high degree of bias or answers readily apparent, limiting the potential for critical thinking. Furthermore, the instructions for the final assignment were frequently ambiguous or even absent. Other issues were also identified such as grammatical errors, formatting inconsistencies, and non-adherence to the institutional template.

5. Discussion

The findings of this collective case study confirm that the faculty-led initiative for the collaborative development of teaching cases had a positive and significant impact on the pedagogical training of the twenty-four participants. Both the focus group transcripts and the document analysis of the cases reveal a highly valued experience, in which the challenge of the English language served as a motivational catalyst and interdisciplinary work enriched the perspectives of the cases.



These results align with the constructivist approach (Stake, 1995; Yin, 2018) which emphasizes how collaborative work can achieve profound changes in practice (Braun & Clarke, 2021).

The triangulation of data was consistent. While faculty reported improving their teaching competencies in designing cases, structuring activities, and promoting critical thinking, case analysis evidenced well-structured development. The content addressed global issues while being grounded in a local context. Interdisciplinary collaboration strengthened this approach by enabling analysis of one case from different perspectives. In addition, the identified weaknesses serve as evidence of the efficacy of the workshop, the collaborative efforts of the faculty with colleagues from diverse fields, and the design of one case study to be analyzed from multiple perspectives.

The interdisciplinary collaboration is a pivotal finding of the study. This collaboration has been shown to improve case quality and foster professional networks. Furthermore, it has been demonstrated to reduce isolation among schools and enable innovative and disruptive work methods. This finding reinforces Modelo University's vision as an institution that promotes collaborative work beyond disciplinary boundaries. It's no wonder the institutional follow-up that the faculty requested will be granted.

6. Conclusion and Recommendations

This study shows that the faculty-led initiative for the collaborative development of cases successfully achieved its three main objectives. The twenty-four participating faculty members experienced a positive yet challenging Case Method workshop, and the collaborative design of cases represented a great opportunity to break boundaries (Objective 1). The experience of designing cases and working interdisciplinarily strengthened their teaching competencies in designing activities, promoting critical thinking among students, and evaluating beyond memorization (Objective 2). Finally, they produced relevant cases that address global issues in local contexts and have great potential for institutional adoption (Objective 3).

Integrating Case Method training, English-language practice, and interdisciplinary collaboration has resulted in a robust intervention capable of fostering significant pedagogical renewal in higher education settings, particularly at Modelo University. However, the study also revealed important areas for improvement that require institutional attention to fully consolidate and scale the initiative's impact. To build on the current success, the following actions are recommended:

- Implement Version 2.0 of the workshop that includes support during the classroom implementation along with peer review sessions and formative feedback.
- Create an institutional database of standardized cases, using the official institutional template and classified by educational level, discipline, and type of reasoning.
- Establish formal institutional incentives such as academic credit, teaching load reduction (time off), or a points-based system to encourage sustained faculty participation.
- Strengthen the teaching competencies and the English component through permanent training programs that preserve the practical and confidence-building approach of the original workshop.
- Design institutional multidisciplinary projects that connect schools and, when possible, external stakeholders (industry, government, and community), with structured follow-up and dissemination of results.
- Provide training on the ethical and pedagogical use of artificial intelligence (AI) to guide faculty toward responsible AI practices.



REFERENCES

- [1] Bonney, K. M. (2015). Case study teaching method improves student performance and perceptions of learning gains. *Journal of Microbiology & Biology Education*, 16(1), 21–28. <https://doi.org/10.1128/jmbe.v16i1.846>
- [2] Braun, V., & Clarke, V. (2021). *Thematic analysis: A practical guide*. SAGE Publications Ltd.
- [3] Delany, C., Illing, J., Mcllroy, M., Daly, R., Bruen, C., Alamuddin, N., Condrón, C., Crehan, M., Doherty, S., Meagher, F., Offiah, G., O'Neill, S., Stuart, E., Torrens, C. & Morgan, M. (2025). Exploring the lived experience of faculty implementing case-based learning: A phenomenological study. *BMC Medical Education*, 25(892), 1-10. doi: <https://doi.org/10.1186/s12909-025-07364-8>
- [4] Levin, B. B. (1995). Using the case method in teacher education: The role of discussion and experience in teachers' thinking about cases. *Teaching and Teacher Education*, 11(1), 63–79. [https://doi.org/10.1016/0742-051X\(94\)00013-V](https://doi.org/10.1016/0742-051X(94)00013-V)
- [5] Mahdi, R., Nassar, I., & Almuslamani, H. (2020). The Role of Using Case Studies Method in Improving Students' Critical. *International Journal of Higher Education*, 9(2), 297-308. <https://doi.org/10.5430/ijhe.v9n2p297>
- [6] OECD. (2019). Higher Education in Mexico. Labour market relevance and outcomes. Paris: OECD Publishing. https://www.oecd.org/content/dam/oecd/en/publications/reports/2019/01/higher-education-in-mexico_g1g99aff/9789264309432-en.pdf
- [7] Rosier, G. (2022). The case method evaluated in terms of higher education research: A pilot study. *International Journal of Management Education*, 20(3). <https://doi.org/10.1016/j.ijme.2022.100660>
- [8] Şen Akbulut, M., & Hill, J. (2020). Case-Based Pedagogy for Teacher Education: An Instructional Model. *Contemporary Educational Technology*, 12(2), 1-17. <https://doi.org/10.30935/cedtech/8937>
- [9] Stake, R. (1995). *The art of case study research*. SAGE Publications.
- [10] Ulvik, M., Eide, H., Eide, L., Helleve, I., Jensen, V., Ludvigsen, K., & Torjussen, L. (2022). Teacher educators reflecting on case-based teaching – a collective self-study. *Professional Development in Education*, 48(4), 657–671. <https://doi.org/10.1080/19415257.2020.1712615>
- [11] Varma, B., Karuveettil, V., Fernandez, R., Halcomb, E., Rolls, K., Kumar, S., & Aravind, M. (2025). Effectiveness of case-based learning in comparison to alternate learning methods on learning competencies and student satisfaction among healthcare professional students: A systematic review. *Journal of Education and Health Promotion*, 14(1), 1-13. [0.4103/jehp.jehp_510_24](https://doi.org/10.4103/jehp.jehp_510_24)
- [12] Villatoro, V., Lemelin, C., Gross, C., Bertholet, R., Gares, S., Hall, M., Henein, H., Kozlova, V., Spila, M. & Haave, N. (2023). Dismantling Disciplinary Silos: A Faculty Learning Community Facilitates Interdisciplinary Teaching Development. *The Journal of Faculty Development*, 37(2), 7-16. <https://eric.ed.gov/?q=source%3A%22journal+of+faculty+development%22&ff1=subHigher+Education&id=EJ1458902>
- [13] Yin, R. (2018). *Case Study Research and Applications*. SAGE Publications. Retrieved from <https://ebooks.umu.ac.ug/librarian/books-file/Case%20Study%20Research%20and%20Applications.pdf>