

Teaching cases in software engineering

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Motivation for this session

1. Inform of teaching cases as an industry-relevant pedagogical approach in software engineering education
2. Give insight into what a teaching case is and how they can be used
3. Prepare you for the call for teaching cases for special issue in *Journal of Systems and Software*

Agenda

1. What is a teaching case and why is it relevant in software engineering education?
2. Demonstration of teaching cases
3. Ideas for teaching cases? Call for special issue in Journal of Systems and Software
4. Summary and next steps

What is a teaching case?

*“A teaching case or case study provides **a narrative about an organization that faces several possible business opportunities and outcomes.***

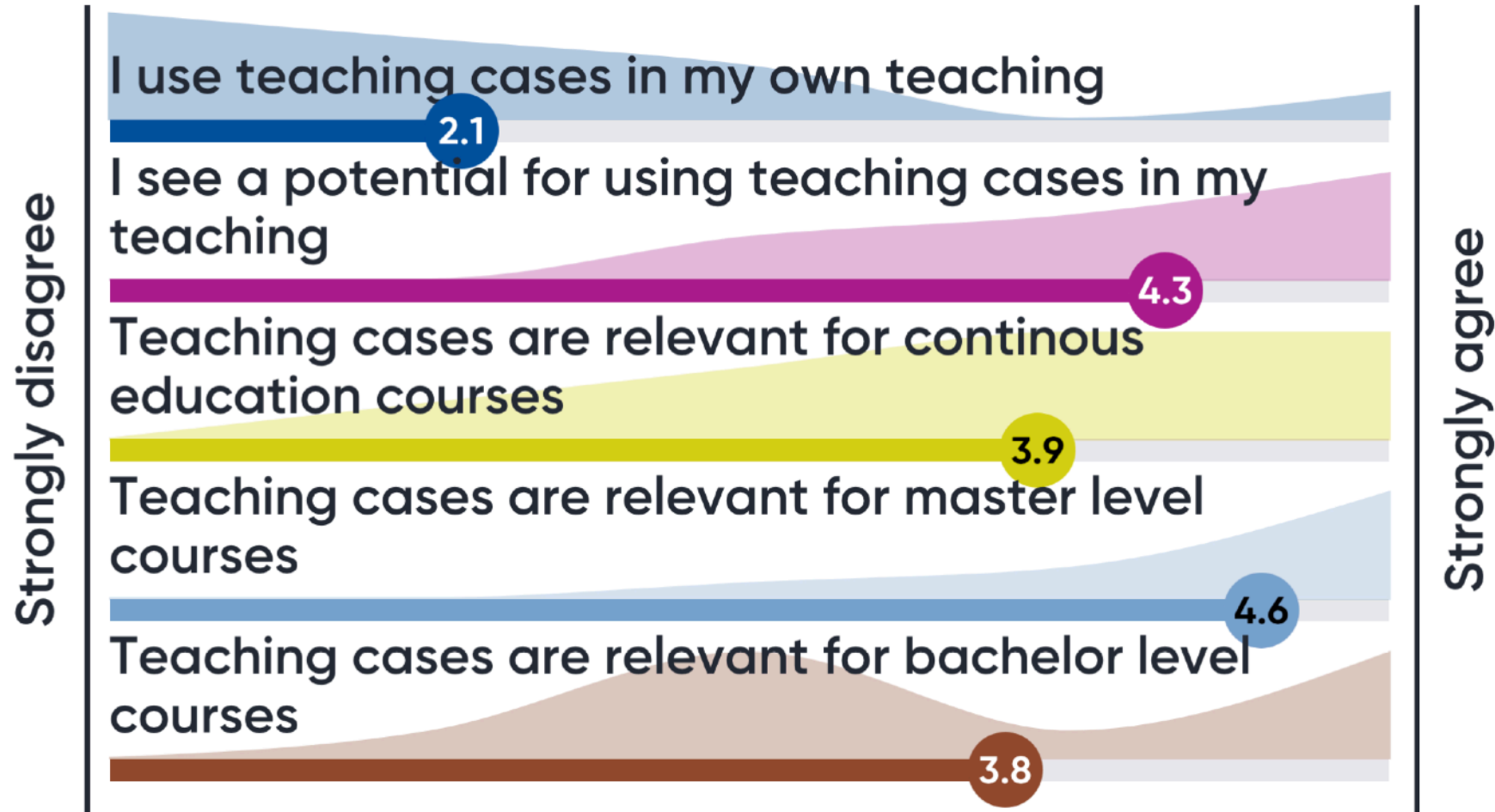
*...a teaching case **combines practical and theoretical understanding** and focuses on a business organization*

...A teaching case resembles a detective thriller: they both have several different outcomes (suspects) and a central engaging dilemma. To begin with, a case must interest students and present an overriding issue that pulls together a managerial issue or decision that requires urgent attention”

- “Writing a teaching Case and Teaching Note: A Reference Guide”, Communications of the AIS

*Format is usually a **teaching case description** and **teaching notes.***

From last year...



Why use teaching cases?

*“The case method is a powerful approach to teaching and learning business subjects. **Its main advantage comes from the fact that it adopts a problem-based as opposed to a solution-based approach to teaching and learning.** It allows students to participate in “real-life” decision-making processes by first identifying the major “question(s)” in the case before formulating appropriate solutions.*

*Using a teaching case in the classroom should be compelling and fun. **It should create a participatory learning experience wherein students engage with each other to share opinions and perspectives.** In doing so, they expand their thinking by drawing on the rich diversity of experiences and approaches that their classmates introduce, which can stimulate creativity and thought-provoking insights and, thus, lead to better decisions”.*

Sources of teaching cases

Project management



The screenshot shows the Project Management Journal website. The top navigation bar includes links for BROWSE & BUY, CASE TEACHING, WRITING CASES, LEARNING WITH CASES, TRAINING & RESOURCES, and ABOUT US. A prominent banner for the 'Members' Case Forum 2024' is displayed. Below this, a section titled 'From the Editors' introduces teaching case studies in the journal, featuring photos of Gina Vega and Monique Aubry. The main text explains the journal's commitment to publishing research relevant to researchers, reflective practitioners, and organizations. It highlights the journal's role in advancing project studies and its focus on creating new knowledge from research. The text also mentions the journal's history and its commitment to providing a platform for scholars and professionals to share their research and experiences.

From the Editors
Introducing Teaching Case Studies in *Project Management Journal*®

Gina Vega, *Organizational Ergonomics, Windham, New Hampshire, USA*
Monique Aubry, *Professor, School of Business and Management, Université du Québec à Montréal, Canada*

Project Management Journal® is an academic journal dedicated to publishing research relevant to researchers, reflective practitioners, and organizations. In this regard, as scholars, we have a double role: first, to advance project studies (Gretzli & Stelbrink, 2018) in an academic world with social research; second, to create new knowledge from research, which transfers to the practice organizations. This relation between theory and practice is not new nor unique to the project management field as it has been a major issue for philosophers of science for centuries (e.g., Aristotle, Descartes). There are several means to establishing a close relationship between scholars and professionals. Van de Ven (2007) suggested the term *engaged scholarship* as a broad approach to establishing a dynamic conversation between scholars and professionals during all phases of research.

Another important means to bridging theory and practice is through learning and education and, more specifically, by using teaching case studies. In the research context, case studies are mainly associated with a qualitative approach (Yin, 2013) and provide rich accounts of real situations, which reveal hidden patterns or practices in specific contexts. In this issue, two articles based on research case studies are presented (Li, Lu, Ma, & Xue, 2018; Amako-Gumpah, Meredith, & White Luyt, 2018). One opportunity for scholars to enhance the impact of their research is to transform the research case study into a teaching case study. In doing so, research results are connected with realistic practical problems in the classroom. In learning situations, teaching case studies contribute to critical sense development and the most important competence: reflexivity.

We are pleased to announce that *Project Management Journal*® is now accepting teaching cases and their accompanying instructor's manuals for a new section in the *Journal*. This section will provide what project management instructors have been clamoring for – peer reviewed, full-length teaching cases that address the varied concepts taught in the project management curriculum. In fact, instructors have requested appropriate teaching cases more often than any other instructional materials over the last several years, and we are doing our best to satisfy this need. The case studies in *PMJ*® will follow typical teaching case conventions. Guidelines can be found at <https://www.pmi.org/learning/publications/project-management-journal/guidelines-for-case-submissions>. The main requirements are as follows:

- Cases must be factual, and releases must be available when interviews have been conducted.
- Length: 4 to 10 pages plus exhibits
- Written in the past tense. Cases submitted in the present tense will be returned without review.
- All cases must be accompanied by an instructor's manual, available only to course instructors, that contains:
 - A brief synopsis
 - The specific knowledge module that the case addresses (you can find a complete list of knowledge modules at <https://pmi.org/teaching-pm/knowledge-module/>).
 - Learning objectives
 - Relevant theoretical concepts or models that can be applied
 - Research methodology
 - Discussion questions with suggested responses
 - A teaching plan, if not inherent in the Q&A section
 - An epilogue

In order to make these teaching cases as useful and appealing as possible, cases should be written about true

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Information systems



The screenshot shows the Journal of Information Systems Education (JISE) website. The top navigation bar includes links for Home, Archives, Best Papers, Submissions, Special Issues, Editorial Team, and Search. The main content area features the 'Current Issue' for Volume 31, Issue 1, Winter 2024, listing several articles. A prominent banner for the 'Journal of Information Technology Teaching Cases' (JITTC) is displayed, highlighting its mission to assist academics, scholars, and teachers in universities and other institutions. The banner includes the journal's logo and a brief description of its focus on providing contemporary case materials for teaching topics in the organization and management of information systems and on the social consequences of information technology.

Journal of Information Systems Education (JISE)

Current Issue
Volume 31, Issue 1, Winter 2024

1-13 Teaching Tip: Leveraging Learning Strategies at Scale – Big and Small Changes in a Big IS Course
Steven Scharon, Temple University
AJ Haver, Drexel University
Matt Doyle, Temple University

14-24 Teaching Tip: IS Capstone Course Design: Quasi-Internships Using Harvard Business Cases
Pamela Howell, California State University, Los Angeles
Amit Arya, California State University, Los Angeles

25-36 Teaching Tip: Enhancing Students' Understanding of Enterprise Systems Using Salesforce
Jason Truhe, University of Missouri
Tianxi Dong, Trinity University
Jodi...

37-47 The...
Sara...

48-58 The...
Sara...

59-66 The...
Sara...

67-72 The...
Sara...

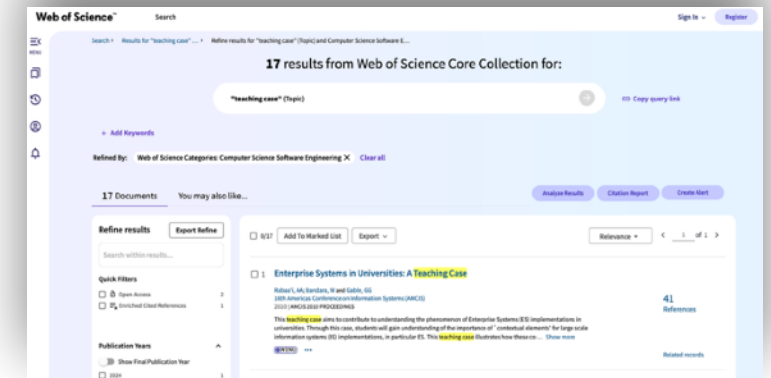
Journal of Information Technology Teaching Cases

Journal indexing and metrics

The Journal of Information Technology Teaching Cases (JITTC) is designed to assist academics, scholars, and teachers in universities and other institutions of further education, providing contemporary case materials for teaching topics in the organization and management of information systems and on the social consequences of information technology. [View full Journal description](#)

This journal is a member of the [Committee on Publication Ethics \(COPE\)](#).

Software engineering



The screenshot shows the Web of Science search results for the query 'teaching case'. The results page displays 17 documents from the Web of Science Core Collection. The search results are filtered by 'Web of Science Categories: Computer Science Software Engineering X'. The first result is 'Enterprise Systems in Universities: A Teaching Case' by Robert A.G. Scharon, Wael G. Gado, and Jodi Amako-Gumpah. The abstract of this article is visible, stating that the teaching case aims to contribute to understanding the phenomenon of Enterprise Systems (ES) implementations in universities. The page also includes a 'References' section with 41 references and a 'Related records' section.

Web of Science

Search + Results for "teaching case" + Refine results for "teaching case" (Topic) and Computer Science Software Engineering X...

17 results from Web of Science Core Collection for:

"teaching case" (Topic) [Copy query link](#)

[Add Keywords](#)

Refined by: Web of Science Categories: Computer Science Software Engineering X [Clear all](#)

17 Documents You may also like...

Refine results **Export Refs**

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Quick Filters

Publication Years

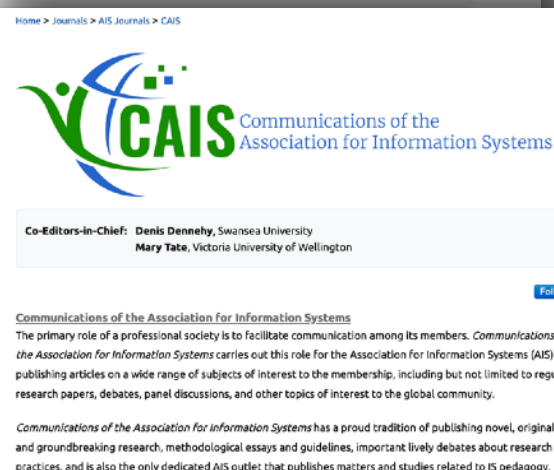
Enterprise Systems in Universities: A Teaching Case

Robert A.G. Scharon, Wael G. Gado, Jodi Amako-Gumpah, Information Systems (AKG)

This **teaching case** aims to contribute to understanding the phenomenon of Enterprise Systems (ES) implementations in universities. Through this case, students will gain understanding of the importance of "contextual elements" for large scale information systems (IS) implementations, in particular ES. The **teaching case** discusses how Research... [Show more](#)

41 References

Related records



The screenshot shows the Communications of the Association for Information Systems (CAIS) website. The top navigation bar includes links for Home, Journals, AIS Journals, and CAIS. The main content area features the CAIS logo and a brief description of the journal's mission. The text states that the primary role of a professional society is to facilitate communication among its members, and that the Association for Information Systems (AIS) carries out this role by publishing articles on a wide range of subjects of interest to the membership. The page also includes a 'Follow' button and a 'Co-Editors-in-Chief' section listing Denis Dennehy and Mary Tate.

Home > Journals > AIS Journals > CAIS

Communications of the Association for Information Systems

Co-Editors-in-Chief: Denis Dennehy, Swansea University
Mary Tate, Victoria University of Wellington

Communications of the Association for Information Systems

The primary role of a professional society is to facilitate communication among its members. *Communications of the Association for Information Systems* carries out this role for the Association for Information Systems (AIS) by publishing articles on a wide range of subjects of interest to the membership, including but not limited to regular research papers, debates, panel discussions, and other topics of interest to the global community.

Communications of the Association for Information Systems has a proud tradition of publishing novel, original and groundbreaking research, methodological essays and guidelines, important lively debates about research practices, and is also the only dedicated AIS outlet that publishes matters and studies related to IS pedagogy.

2. Demonstration of teaching cases

- Select teaching case A or teaching case B
- Skim the teaching case (15 min individually)
- Discuss in groups of 2-3:
 - Learning objectives
 - Questions that are asked
 - Suggestions on how to use them in class
 - Material cases are based on

A:



<https://bit.ly/3YWkv57>

B:



<http://bit.ly/3SbLd63>



Special Issue

Software engineering teaching cases

Journal of Systems and Software

Guest Editors

Professor Torgeir Dingsøy
Norwegian University of Science and Technology, Norway

Professor Casper Lassenius
Aalto University, Finland

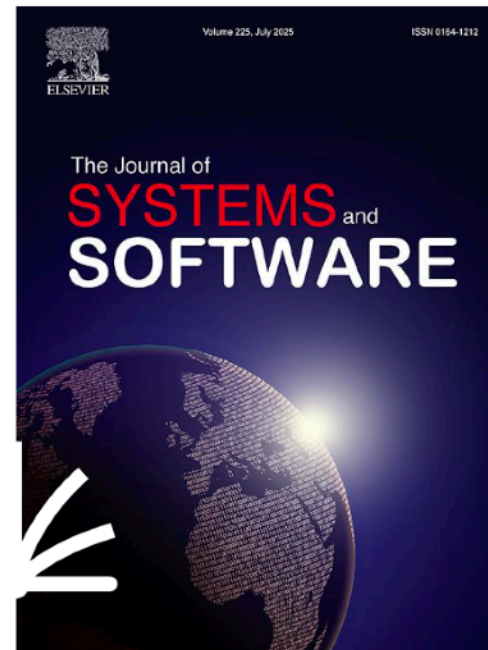
Professor Maria Paasivaara
School of Engineering Science, LUT University, Finland

For this special issue, we seek teaching cases based on ongoing or completed empirical studies of software engineering practice that are relevant to software engineering education at the bachelor, master, or continuous education levels.

Teaching cases could be textual descriptions of situations, typically with a protagonist who has to make a choice. The written description can be supplemented with interactive material such as videos or other digital formats like links to source code repositories. A teaching case must be accompanied by a teaching note that gives information on which courses the teaching case is suitable for, the main learning objectives, and how the teaching case can be used, for example, with questions for students or tasks for student assignments. For more background on teaching cases, we refer to a reference guide from information systems (Sipior et al. 2021).

Submission open date: 1st November 2025

Submission deadline: 1st December 2025



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8.6

3.7

2024 Impact Factor
Journal Citation Reports®
Clarivate Analytics, 2024

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