

Technical University of Denmark



Educating reflective practitioners in large classrooms

Geraldi, Joana; Thuesen, Christian

Publication date:
2017

Document Version
Peer reviewed version

[Link back to DTU Orbit](#)

Citation (APA):
Geraldi, J., & Thuesen, C. (2017). Educating reflective practitioners in large classrooms. Abstract from ETALEE 2017, Odense, Denmark.

DTU Library

Technical Information Center of Denmark

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Educating reflective practitioners in large classrooms

Joana Geraldi [DTU Management Engineering]

DTU, Denmark, joasta@dtu.dk

Christian Thuesen [DTU Management Engineering]

DTU, Denmark, chth@dtu.dk

Keywords – project management, large classrooms, reflective practitioner, reflexivity, sustainable developmental goals.

Type of contribution: hands-on practices

ABSTRACT

Projects abound in society, and turned from an ‘accidental profession’ to an attractive career path (Pinto & Kharbanda, 1995). In this line, engineers and engineering students are increasingly recognizing the criticality of project management to their own profession. The consequence is that we need to educate an increasing number of students in project management. At the Technical University of Denmark (DTU) - one of the leading engineering universities in Scandinavia - the number of students taking our courses has increased organically from 150 to over 300 in the last 5 years - a number that is believed to grow even further in the coming years. We thus face the challenge of educating an increasing number of students.

One alternative is a focus on traditional learning methods, multiple-choice exams, and a deterministic learning path. However, such tactic is unlikely to develop the reflective practitioner that are required in practice, as seminally argued by Schön (Schön, 1983, 1987), and also applied and argued to project management specifically (Crawford, Morris, Thomas, & Winter, 2006). This hands-on section will describe and analyze our experience – successes and failures – our program to change education of project engineers at DTU with the vision to educate large number of students and enable them to reflect and experience how to DO projects, as oppose to teaching normative tools and techniques.

This hands-on section will facilitate discussion about practices to encourage the development of reflective practitioners in large classrooms. It will do so by creating a context for you to experience being a student in a large classroom, and hence being detached from the ‘actual author of the work’. Akin blended learning strategies, you will watch an introductory video, and you will do individual and group exercises, discussing your experiences and this experience of being detached from the ‘teachers’. The discussion will be facilitated by another person (instead of the authors), which will act like a ‘teaching assistant’, as students experience in large classrooms. We will instruct this other person, but will not be there in the discussions itself.

We then join by the end of the discussion, when we will close the session sharing our practices and experiences in dealing with large classrooms. Our program included thirteen mini-projects with implementation of peer grade, blended learning, modularization of education, ISO21500 certification, project games, development of flexible teaching material, embeddedness of project

management throughout student practices, connection to societal and global challenges, industry advisory board, and the development of a Project Laboratory.

Our work makes two key contributions. First, it points to some pragmatic struggles directly from the classroom, when attempting to reach out to large number of students, while not compromising on a practice approach to projects, and still carrying out an active research career. Second, it positions the relevance of a holistic and systemic view on university education of project managers to engineers.

REFERENCES

- Crawford, L., Morris, P., Thomas, J., & Winter, M. (2006). Practitioner development: From trained technicians to reflective practitioners. *International Journal of Project Management*, 24(8), 722–733. article. <http://doi.org/http://dx.doi.org/10.1016/j.ijproman.2006.09.010>
- Pinto, J. K., & Kharbanda, O. P. (1995). Lessons for an accidental profession. *Business Horizons*, 38, 41–50. [http://doi.org/10.1016/0007-6813\(95\)90054-3](http://doi.org/10.1016/0007-6813(95)90054-3)
- Schön, D. A. (1983). *The reflective practitioner: How professionals think in action*. New York: Basic Books.
- Schön, D. A. (1987). *Educating the Reflective Practitioner*. San Francisco: Josey-Bass Publishers.