Authors
Dr Daniela Laureiro-Martinez, D-MTEC, Technology and Innovation Management
Anna Deréky, D-MTEC, Technology and Innovation Management

Innovation Leadership seminar

We use participant-centered tools that encourage students' reflection, their personal development and help them discover their approach to leadership. The course offers opportunities to learn in a real corporate environment though trial-and-error learning.

Introduction

The Innovation Leadership seminar aims at developing students' managerial and leadership skills by promoting their critical thinking processes. Additionally, it fosters the development of more traditional project management and innovation management expertise. In the course setting, the students work on a real-life project in collaboration with a leading company in the building industry.
Facts about the course:

- Kick-started by Innovedum fund for innovation in education
- Held since 2015 as a core course of the Master in Integrated Building Systems (MBS) and elective for D-MTEC MAS/Master students
- 6 ECTS = 180 hours per student
- 20-30 students with backgrounds in engineering, architecture and management
- Students take leadership in working for a corporate client on real innovation cases
- Partner companies are sector leaders and provide feedback from top management

Teaching concept

Our innovative teaching techniques focus on three areas of development: Innovation, leadership and project management.
Project Management:
Students learn to self-manage their project while being supported by numerous project management techniques, coaching exercises, and individual feedback through learning diaries. An additional focus is given to design thinking methods and prototyping tools.
Innovation:
Students learn about specific topics related to current innovation in the building sector in Switzerland. They learn to understand technology changes with an ecosystems view and think about the impact of new technologies in the building industry company (e.g. the commercialization of Building Information Modelling, BIM).
Leadership:
Students conduct a project with diverse stakeholders requiring them to take managerial, technical, personal responsibility for the real-life company case. This high pressure environment leads to an intense self-reflection journey, team experience and fertilizes their pro-active behavior towards the client. On the personal level, students have to identify and achieve their very own authentic learning goals. Teaching tools involve the learning diary and self-assessment tools of individual abilities and traits, which helps their reflective journey and teaches them self-directedness. On the team level, students are teamed up to deliver a real-life project to the company. The teams

are diverse and the students' work focuses on cooperativeness and how to be effective team members. Teaching tools involve peer-to-peer feedback, coaching and open space workshops. On the company level, students learn how to deal with different stakeholders and how to create impactful and sustainable solutions for their client.
Course Design:

- Real project: non-trivial real project with a demanding client, e.g. develop a market entry strategy for a new technology, evaluate and improve the roll-out of an innovation management process
- Leadership development: project with diverse stakeholders requires talking different languages - managerial, technical, personal. Real responsibility creates high pressure leading to intensive team experience. Personality profiling, learning diaries and coaching fertilizes proactive behavior
- Repertoire: students learn and apply methods in project management, innovation, strategy and design thinking along the project with bi-weekly workshops – always related to real projects
- Topical learning: specific topics related to innovation in the building sector flow from real case and each team's research

Analysis of student learning

This course is challenging for students, because it promotes their self-directedness and their critical thinking abilities. Students need to define their very own learning goals and are assessed and graded on whether they have progressed towards achieving them.
This approach teaches students to:

- Reflect and explore possible personal goals and discover new ideas
- Learn to work in an unknown direction with no certain outcome
- Explore how a project with internal and external stakeholders works when people have conflicting interests, that might also vary according to the different time perspectives that are taken into account
- Use design thinking and solution-oriented coaching techniques

Lessons learnt

Students passionately develop new and innovative projects for the partner company. They gain hands-on experience with a real project and deep-dive into rich reflections about their personal opportunities both on leadership and innovation in this process. Students enjoy the innovative teaching techniques. Often times, they need to learn to adjust on setting their own learning goals and getting into a "critical thinking mindset".
Transferability and sustainability:
The question of whether what students learn in the course will be remembered and used after the course, is a central question for the faculty involved. In order to evaluate to what extent "what students learn in the course does not stay only in the course" we are currently in conversations with the MBS program coordinator planning an evaluation that should take place as soon as a higher number of students from the program will graduate.
On the topic of sustainability, we have had, so far, two different takes. First, whether the course could keep running without the support from Innovedum. Second, whether we can promote a view of innovation that is not separated from sustainability. On the first point, we have redesigned and redistributed the roles of the different course contributors in such a way that the course can now run also when the funds from innovedum are over. On the second point, we promote student's sustainability thinking

by asking them to critically evaluate their creative ideas under the light of the different actors involved, as winners and losers, in the past, today and in the future.
Challenges:
Is such a “teaching intense” course scalable from 30 to 120 students?
Is such a course suitable for all student’s personalities, professor’s personalities and type of programs?

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