Co-teaching multidisciplinary teamwork - challenges and success factors in curriculum development

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Marketing careers typically involve working together with people from various disciplines, such as statistical researchers, manufacturing engineers, graphic and industrial designers, communication, to mention a few. Creativity, that is typically associated with marketing, blooms from interaction between people coming from different backgrounds and having different experiences. Indeed, cross-functional cooperation is an established strategy in business as companies seek to bolster cooperation especially between marketing, design, and engineering. When successful, multidisciplinary working enables richer and more diverse understanding about what creates value, what is commercially important, technically feasible, or difficult to manufacture.

It is evident that multi-disciplinary teamwork is an essential skill for work-ready marketing graduates. Therefore, the students need to develop and practice this skill already during their education as higher education provides a safe environment for a trial and error process. However, higher education institutions, especially research universities, often have stiff structures. Research and teaching as well as degrees are based on disciplines, and therefore interdisciplinary curriculum development and multidisciplinary learning experiences may be difficult to accomplish.

Structural difficulties represent only one kind of challenges we face in higher education when developing multidisciplinary courses. Other challenges include for example interdisciplinary cultures that affect the pedagogical approach and learning requirements within a particular discipline. Moreover, individual differences such as learning styles or cultural background affect teaching, learning and collaboration in general.

The aim of this position paper is to identify challenges and success points in multidisciplinary co-teaching. We focus on teachers' perspective, bring up critical incidents and suggest ideas how to avoid typical pitfalls in multidisciplinary curriculum development. By doing so, we aim to foster discussion and research on this topic.

Our case context is a multidisciplinary user innovation course. User innovation represents a fruitful context for multidisciplinary teamwork by its nature. In order to foster creative thinking and new innovative solutions, the course adopts a learning approach based on independent multi-disciplinary student teamwork, i.e. students from different disciplines, ranging from engineering disciplines to business and communication studies working together towards the same goal and taking responsibility for the team's innovation process. The course is available for both national and international students making it multi-cultural and thereby providing a further challenge for the teamwork.

Picture 1 presents the course structure. The course includes two major face-to-face events, one in the beginning and one in the end of the course. Between these two events, the students work both individually and in teams of 4-6 students. The teams are created by the teachers in order to

ensure multidisciplinary teams. Individual assignments focus on theoretical and methodological aspects of user innovation whereas team assignments focus on application of that knowledge. The idea behind the individual assignments in an early phase of the course is to ensure the individual motivation for completing the course and to avoid possible freerides. The teams have three coaching sessions where they present their ongoing projects to a multi-disciplinary coaching team. In the final event, they create a concept-of-proof and present their project outcome to the public. Each assignment is evaluated based on an assessment rubric.

Picture 1. The course structure of Multidisciplinary User Innovation Course

Three teachers are responsible for the course and this teacher team is also multidisciplinary representing three faculties of the case university. The coaching sessions involve a larger number of faculty members and PhD student as Teaching assistants to discuss the team projects. After the final event, the students write feedback where they reflect on their learning, the challenges they have faced, how they have tried to overcome those challenges and how they would like the course to be developed further. This feedback from two years and student team interviews from one year combined with teacher observations form the empirical data for our study.

In our presentation, we discuss how cultural and structural factors affect teaching and learning multidisciplinary teamwork. We will identify critical incidents throughout the course and analyze the reasons behind them. By doing so, we would like to encourage both research and practice to engage in multidisciplinary teamwork teaching.

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