On the impossibility of generally bringing core subject competences into play in innovation teaching

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ABSTRACT

In interdisciplinary hands-on innovation courses involving large numbers of students, the difficulty of ensuring, that every student's core subject competencies come into play, quickly becomes a matter of concern. Many students object that time and ECTS spend on courses not adding directly to their core subject competencies might be better spend on courses that actually do. University policies, on the other hand, at times require the students to participate in such courses, i.e. by making the courses mandatory. A clash between students' expectations and reality may result.

In this study I argue, that it is in general impossible to bridge the gap between university policies and the students' expectations of always adding to their core subject competencies when it comes to mandatory interdisciplinary hands-on innovation courses subject to the fairly trivial constraint that ideation is part of the considered innovation process. In general it is simply not possible to construct such a course.

Most innovation processes entail, almost per definition, an ideation phase (Drucker, 2002). The ideation phase is where the project group comes up with possible solutions to the "opportunities at hand". The "opportunities at hand" are found within some project setting and often identified by the group itself. Unless one constrains the outcome space, there is literally no way of predicting what ideas will surface during ideation. Typically the project group selects one idea – or one "value proposition" in Osterwalder's terminology (Osterwalder & Pigneur, 2010) - to further improve, refine, and qualify during the next phases of the innovation process. Clearly the choice of value proposition should, among other things, be based on the competencies represented in the group, i.e. most of the competencies perceived to be necessary for working with the idea in the next phases should be present in the project group. This is, however, far from saying that every group member's core subject competencies can come into play. This is prevented by the element of chance or unpredictability that the ideation phase introduces.

Of course one can then try to play with the project settings and alter those in order to force the outcome of the ideation phase into something where all group members' core subject competencies do come into play. This will, however, almost inevitably close the project and the "challenge at hand" leaving less room for ideation thereby compromising from the outset the ideal innovation process

The general argument will be exemplified and concretized by the 10ECTS course Experts in Teams (EiT) mandatory to all fifth semester students on any engineering program at the University of Southern Denmark.

REFERENCES

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