

BESTPRACTICE2023



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Flipped classroom for students to prepare the master thesis

The flipped classroom is an instructional model in that students learn the basic knowledge prior to the classroom meeting instead of being transmitted by teachers during the lectures. Other active learning activities, such as discussion, supervision, and solving students' problems will be conducted during classroom time.

The courses "Advanced Topics in Computing" and "Advanced Topics in Telecommunication Systems" are mandatory second-cycle courses intended to give the students possibilities to deepen their knowledge and understanding within a specific area in computer science or telecommunication systems. They are course that constitutes a direct preparation for a future master thesis.

Based on the students-centred view, to enhance the students' engagement, I thereafter put more effort into explaining to the students in the first lecture on the course that the flipped classroom approach will be applied in teaching and learning. The students are supposed to define a topic in computer science or telecommunication systems within which they want to explore state-of-the-art more in-depth before they come to the classroom.

And they share what they have learned – and how they have learned it - with the other students on the course through their successive presentations of their work in the classroom. We also organize supervision seminars to supervise the students group by group during classroom time. The students are asked to bring their own questions regarding their selected topics. Furthermore, last year, master thesis examiners were invited to attend one seminar where students presented their potential topics, research questions and research methods for the coming thesis. The examiners gave suggestions and helped the students improve their thesis ideas before starting the thesis course.

By applying flipped classroom approach to those courses, the teaching and learning goals can be easily achieved. The students are more actively engaged as co-creators in their learning experience, and share the responsibility for their own learning, in partnership with the teachers. As a result, the first round submission of thesis project plans and the pass rate have significantly increased.



Picture: Annette Q Pedersen, University of Copenhagen;

/ The presentation is given in English

Multisalen / 18 October / 8:15 - 10:00

