

Pair Lecturing Model-Driven Software Development

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Motivation

To encourage our students to take a deep approach to learning in the course Model-Driven Software Development we *verbalized the cognitive process* [1] behind developing software models through pair lecturing.

Setup

Pair lecturing was introduced without an increase in teaching hours by substituting some of the hours assigned for preparing supervision for lecturing [2]. During the lectures we took turns being the *driver* (driving the lecture forward) and the *navigator* (asking questions, suggesting alternatives) [3]. Often the navigator has a different opinion than the driver, resulting in a discussion among teachers and students on how to best use the models.

Student response

The educational impact of implementing pair lecturing was evaluated through a survey [2]. The statements were answered according to a 5-point Likert scale; 1 corresponded to fully disagreeing and 5 to fully agreeing. 85 out of 94 students answered the survey. Two of the statements are shown below. The first statement read: "I was more active during the lectures than in traditional lectures", where a traditional lecture was defined as one teacher relying mainly on slides. Two student comments were: "*it feels easier to ask questions*" and "*pair lecturing helps you stay focused on what the teachers are doing*". The second statement, "Pair lecturing should be used in more courses", received the comment "*I realized that the subject requires that you develop your own point of view*". Not every student was happy with pair lecturing, "*I found it difficult to understand important points when opinions differed too often*".

	1 (disagree)	2	3	4	5 (agree)	No answer
"I was more active..."	2	8	33	17	22	3
"Pair lecturing should be used more..."	5	3	32	10	33	2

Teacher perspective

Reflection-in-action can be described as "thinking on your feet" while *reflection-on-action* is done afterwards [4]. It is usually after the lecture that you have the time to take a step back and reflect on what happened and the decisions you made. It is often then you fully understand the meaning of a student question or comment, and what a more appropriate interaction would have been. But that "teachable moment" is lost. One of the benefits of pair lecturing is the possibility of reflection-in-action [5]. It means that by pair lecturing we do not only create more opportunities for teacher-student interaction – we also make better use of that interaction.

References

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- [4] Schön, D. (1983) *The Reflective Practitioner. How professionals think in action*. London: Temple Smith.
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