

BASIC: Boosting the Activity of Students in between Contacts

Abstract

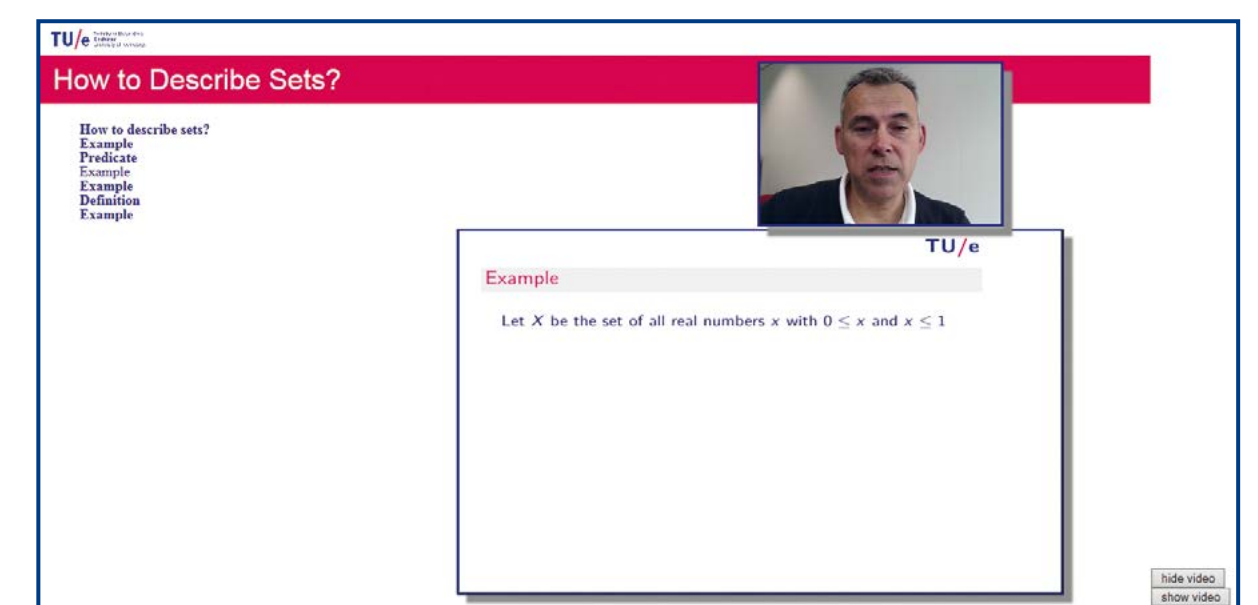
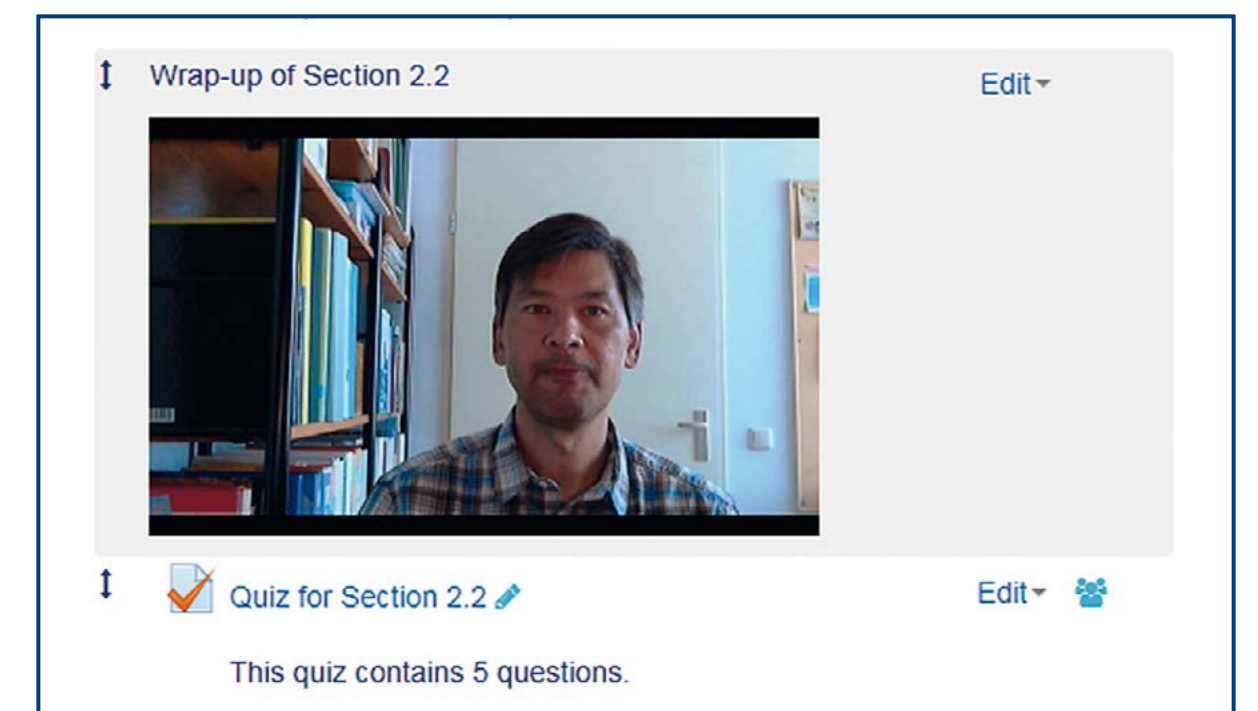
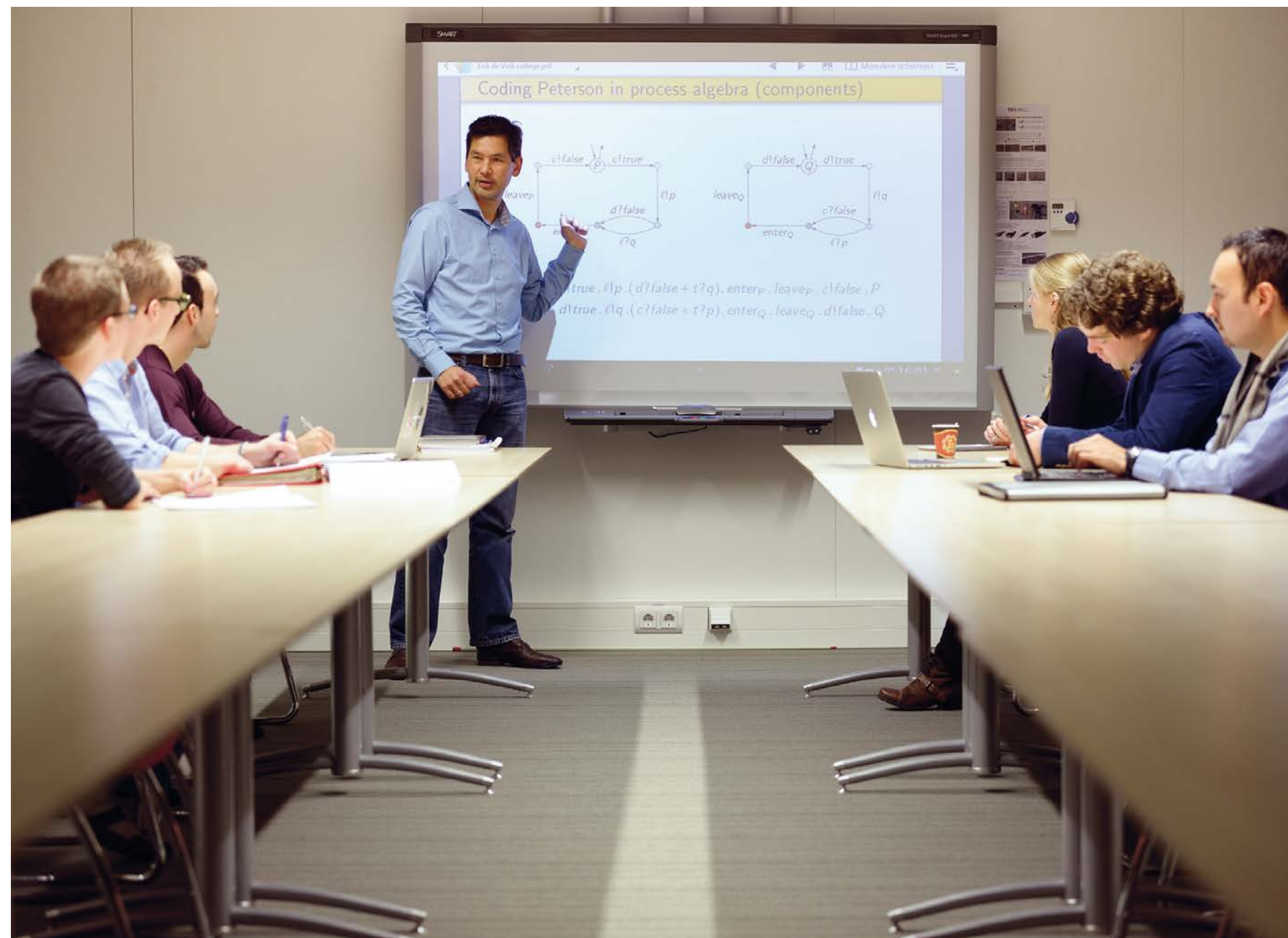
By boosting the study activity in between contact hours we aim to enhance the student's activities. Students visit the relevant webpage to watch a video clip, do some activities and to receive feedback on their current assessment of the course objectives. Because web-based, participation can be monitored and collected either per student individually or group-wise. We choose to

have seemly development of video and activities: feasible within limited time, requiring low-tech and easy accessible software only, and being under direct and full control of the educator. We seek forms that are appealing and have a clear benefit to the student.

Objective

We experiment with a web-format called WTA, containing *wrap-up*, *test* and *advice*. The WTA is offered in between the half days of the course. A video clip gives a summary of high-lights or addresses a topic relevant for a smooth

transition between meetings. A small test is offered to provide feedback, or challenges and issues are raised to foster further deliberation. Furthermore, a student may be advised to revisit a specific part of the material.



Context

Many courses in the Bachelor education at the Department of Mathematics and Computer Science alternate *lectures* in large lecture theaters and *tutorials* in smaller class rooms. Typically, tutorials are overcrowded at the beginning of the quartile allowing little time for tutor-student interactions, but have rather low attendance near the end with students giving priority to practical

assignments or otherwise diminishing their engagement in the course. The BASIC project aims to provide a means to students to participate more effectively by stimulating the self-study of material, the reflection on own assessment of knowledge and skills, deliberate exercise and focused tutor-student interaction.

Practice

We are exploring various ways to combine video of the lecturer with slides or screencasts into a clip. One approach is fully html-embedded, decorating a separately taken video stream with slides. Another approach makes use of Adobe's Presenter to integrate video, speech and slides within one of-the-shelf tool. A third approach addressing hands-on topics exploits the

editing facilities of QuickTime to combine audio with screen activity. Material is uploaded to the Moodle-based OnCourse web system available at TU/e, which provides support for multiple choice tests. In bi-weekly meetings we evaluate intermediate results, and discuss didactics and technicalities.

Results

Aiming at an accessible tool environment supporting mathematical formalism we have been picky in the software to use. Still, the three approaches chosen provide a diverse palette of video-slides integration. Clearly, within the three lines of development a preferred way of working starts to emerge which will consolidate by the end of the project. Didactics, both regarding presentation

and structure, will likely remain the subject of debate for the years to come. However, elements of good practice are being identified to pave the way for smoothed usage and further enhancement. An illustrative webpage will be made available.



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