

LS4VET workgroup (alphabetical order):  
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## Regular Expressions in Programming

Identifying simple regular expressions by explorative learning (Programming; HTL – Junior Technical College, 10th Grade)



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This Lesson Study (LS) dealt with a subject matter within the field of programming that is both vital and highly challenging. Students are confronted with it for the first time in the second year at HTL (i. e. 10<sup>th</sup> grade). This LS4VET unit, hence, introduced a crucial step in their programming studies.

Taking place in late June (after the marking process for the current schoolyear had been closed), student participation was not supported by any benefit such as (extra) credits. It may be assumed that it was genuinely interest-driven.

The Lesson Study was organised by 3 technical faculty teachers in a series of team meetings. “Regular Expressions” was established as one of two most suitable subjects and confirmed in a clear 3:1 student vote, while the equally challenging “Control break” fell through.

Contrary to the teacher-centred approach commonly applied at this and probably most other technical schools, the team followed Professor Mewald’s advice and implemented an explorative learning approach. Consequently, teaching materials had to be adapted, which was realised in further team sessions.

Two individual lessons (Teachers: Wöhrer, Schermann) were carried out, both in a double-lesson setting (100 mins), on different dates and in different classes. Following each lesson, a feedback session was held, which led to adaptations in both the lesson plan and the materials. The 2nd lesson (Schermann) thus already followed an enhanced lesson plan.

Reports were written in the consecutive days and uploaded to the LS4VET platform.

The most prominent “lesson learned” was that all parties to the project benefitted from the thorough feedback sessions: While both teachers and observers reflected on methodology and didactics, students reflected their learning process and gave astonishingly detailed feedback.

This first Lesson Study at the College of Engineering (HTL) Wiener Neustadt has opened a new dimension of professional development. Not only has it proven most helpful (and fruitful) in experiencing teaching methodology. External and internal staff, as well as the students, fully explored their potential as shareholders in the learning process.

