Investigating Effects of Cooperative Open Learning (COOL) on Students’ Learning Process

Christoph Helm, Johannes Kepler University Linz, Austria

Background Scenario

Austrian commercial colleges called „Handelsschulen” struggle with high heterogeneity among their students (e.g. high proportions of migrants, refugees from the labour market...), that led to the highest dropout rates within the Austrian educational system (56.4 %; Statistik Austria 2011). In response to this as long ago as in 1996 a small team of teachers introduced a progressive model of teaching called COoperative Open Learning (COOL), which borrows guiding principles from the Dalton Plan. COOL gained nationwide attention and soon spread over Austria. At the moment over 100 Austrian commercial colleges are “COOL-certified” (cooltrainers 2011).

Impact Theory

Major COOL-Elements:
- Teamteaching
- Working on assignments
- Teachers are coaches
- Class councils

From a theoretical point of view (Offer and Use Model, Helmke 2009) one could argue that students within the COOL-model compared to traditionally taught students face a learning environment of higher quality, due to: more individualization and student-centred instruction, more motivation and collaboration as well as advanced education among COOL-teachers... Furthermore, the above-mentioned elements should force teachers to act in a way that leads to higher motivation and self-regulated learning among COOL-students, driven primarily by higher autonomy, competence and relatedness (Reeve, Ryan, Deci & Jang 2008). Learning in such an environment should also foster abilities of self-regulated learning (Zimmerman 2006). Therefore one could also argue that COOL-students benefit more from school activities and thus total learning time should increase with the COOL-model or respectively should be used more effectively by the students.

Study Design

- online survey including self-assessments & opinion polls as well as paper-pencil-competence test
- intervention-control group design: COOL-classes vs. „traditional”-classes
- longitudinal measurement (4 cycles)
- sample size: pilot study = 410 (14 classes); main study = approx. 40 classes, so that multilevel analysis can be taken into account

Early Findings on Compositional Effects

Altrichter et al. (2011) suppose selection effects on the composition of school classes (e.g. regarding the social background and academic performance) due to the attractiveness of school profiles like the COOL-model. If this is true for the present sample, it must be taken into account when analyzing effects. However, the plots show that there are no compositional effects.