A Design-Based Approach with Vocational Teachers to Promote Self-Regulated Learning

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Pre-vocational secondary education

- duration of 4 years
- students aged between 12 and 16 years
- implementation of workplace simulations
  - idea
  - difficulties
  - requirements
How optimise students’ learning in WPS?
The power of

- authentic learning tasks &
- feedback

in promoting self-regulated learning.
Research questions

1. How do teachers experience working with the redesigned learning tasks and providing feedback?
2. What is the effect of the redesign on students’ self-reported self-regulated learning?
3. How do students self-regulate their learning during the intervention and does their regulation improve?
Method

• Participants:
  – 3 teachers
  – 66 students (15.02 y, SD 0.72)

• 2 design cycles:
  1. Learning tasks
  2. Feedback

• Measurement:
  – ILS (Slaats, 1997)
  – Student reflections
  – Student task motivation
  – Teacher reflections
  – WPS observations
Intervention 1: Learning tasks

30 tasks redesigned and improved by:

- Authenticity
- Goal and learning goals
- Work preparation
- Assessment criteria
- Reflection
Intervention 2: Feedback

- Process- en self-regulation level
- Constructive interaction between teacher and student

(Hattie & Timperley, 2007)
Results 1: Teachers’ reflections on the redesign

Redesigned tasks:
- Time to get used
- Clear structure
- Guiding and assessing easier
- Fewer questions and faster
- Increase in workload

Feedback:
- Awareness
  Breaking with routines = effortful
- Constructive interactions
- Attention, positive reactions
- Information early in process
doubts
Results 2: Students’ self-regulated learning

ILS questionnaire:
• Positive effect on internal regulation ($F(1,62) = 5.4$, $MSE = .231$, $p < .05$, $\eta^2 = .080$)
• No significant results for external regulation

Task performance:
• Work preparation often not done or too late and often either realistic nor specific
• Improvement in reflection (from short, superficial incomplete to more lengthy and comprehensive)
• Increase in work/learning-related processes
Conclusions

• Class management; provide leading thread
• Freeing time for guidance
• Co-design with teachers
• Communication
• Learning process for teachers and students effortful and time consuming
• Create time and space for self-regulated learning
• Make purpose and added value clear
• Room for improvement
• Quest for SRL in vocational education just started
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