

A design-based approach with vocational teachers to promote self-regulated learning

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

Helen Jossberger, Saskia Brand-Gruwel, Margje van de Wiel, and Henny Boshuizen

Centre for Learning Sciences and Technologies, Open Universiteit, The Netherlands & Maastricht University, The Netherlands



University of Regensburg

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

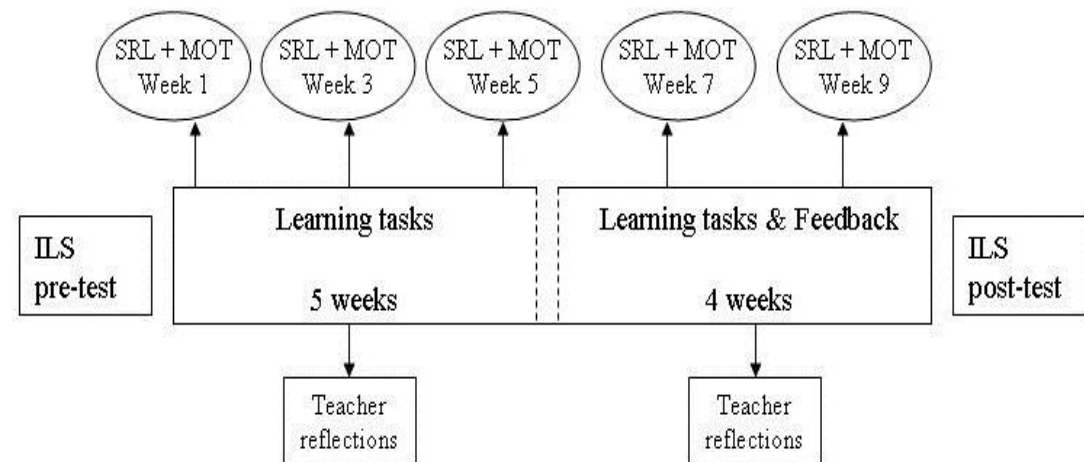
in promoting self-regulated learning.

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

Terugblik op je werkwijze en werkhouding

Vul nu in hoe de opdracht is gegaan.

Heb je met plezier aan de module gewerkt? | ☹️☹️ | ☹️ | 😐 | 😊 | 😊😊

Heb je de opdracht naar tevredenheid afgerond? | ☹️☹️ | ☹️ | 😐 | 😊 | 😊😊

Hoe vond je de module? | Zeer moeilijk | moeilijk | neutraal | makkelijk | zeer makkelijk

Wat ging goed en waarom ging dat goed?
.....
.....

Wat ging minder goed en wat heb je toen gedaan?
.....
.....

Waar wil je de volgende keer op letten of anders doen?
.....
.....

Als je klaar bent met deze praktijkopdracht (alles opdrachten/vragen netjes hebt ingevuld), ga je naar de docent.
Vraag aan de docent om het resultaat te beoordelen.
Als je alles goed gedaan hebt, zal de docent op de werkwijze een cijfer zetten achter Praktijkopdracht.

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)

Pocket feedback


Aim: Close the gap between current level of performance/understanding and desired level

Effective feedback answers 3 questions:

1. What are the learning goals of the student?
2. What is the progress in relation to the goals?
- product en process
3. How can you stimulate the progress?

Provide feedback on:
Process level
Self-regulation level

Stimulate learners to explicate how it is going!



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



✉ Helen.Jossberger@ur.de