The 3R Study Strategy

Optimizing the effectiveness of the ‘Read-Recite-Review’ study strategy in learning from text

Pauline Reijners, Liesbeth Kester, Sandra Wetzels, Paul Kirschner
Open University of the Netherlands - CELSTEC
Overview

• Setting
• Background
• The 3R Study Strategy
• Research question & hypothesis experiment 1
• Participants & Design
• Procedure & Material
• Work plan
Background

• Testing-effect

• Study strategies

• Enhancing the effectiveness and efficiency of self-testing

• Instructional interventions
Setting

- CELSTEC ‘Learning & Cognition programme’

Promotor Prof. dr. P. A. Kirschner

Supervisors

Dr. L. Kester

Dr. S. A. J. Wetzels

Centre for Learning Sciences and Technologies
The 3R Study Strategy

• Three elements:
  – Read: reading a text or text passage
  – Recite: recitation of what is remembered
  – Review: reading the text of several passages second time

• Characteristics:
  – Learner-controlled testing
  – Can be used to improve learning
Research question:

‘What is the effect of activating learners’ prior knowledge on the effectiveness of the 3R-strategy and ones performances on a final test?’

Hypothesis:

‘Participants in the 3R+ condition (with activation prior knowledge) will outperform participants in the other conditions on a retention test and participants in the 3R condition will outperform those in the control condition’
Participants & Design

- Participants
  
  About 60 secondary school students (havo/vwo year 4/5)

- Design
  
  randomized three group design that compares 3 learning strategies:
  
  – A 3R+ strategy group in which prior knowledge activation is incorporated
  
  – A 3R strategy group
  
  – A control group (‘read-read-read’ strategy)
Procedure & Material

- Procedure
  - Learning phase
  - Distracter task
  - Test phase

- Material
  - Prose texts (for example history texts)
  - Sudoku puzzles
  - Recording devices
## Work plan

<table>
<thead>
<tr>
<th>Month</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/2011-4/2012</td>
<td>Write literature review for dissertation</td>
</tr>
<tr>
<td>12/2011-4/2012</td>
<td>Prepare experiments: develop materials, contact schools from secondary education</td>
</tr>
<tr>
<td>5/2012–12/2012</td>
<td>Experiment 1: Set up, analysis and report results</td>
</tr>
<tr>
<td>1/2013-8/2013</td>
<td>Experiment 2: Set up, analysis and report results</td>
</tr>
<tr>
<td>9/2013-4/2014</td>
<td>Experiment 3: Set up, analysis and report results</td>
</tr>
<tr>
<td>5/2014-12/2014</td>
<td>Experiment 4: Set up, analysis and report results</td>
</tr>
<tr>
<td>1/2015-8/2015</td>
<td>Finish dissertation</td>
</tr>
</tbody>
</table>