Guided reflection procedure for supporting the development of practical knowledge: A comparison of three conditions

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Introduction

• A “gap” between theory (i.e. research-generated knowledge) and practice in teacher education (see for example, Kansanen et al., 2000; Korthagen, 2001; Meijer, 2010; etc.).

• Teaching requires a great deal of knowledge that is specific to the work of teaching (see i.e. Grossman et al., 2009; Loughran, 2010).

• Teacher’s practical knowledge is the know-how teachers construct through experience and which is the basis for dealing with every-day teaching situations (Meijer, 2010).
Introduction

• **Reflection** can be defined as a cognitive process carried out in order to *learn from experiences* through individual inquiry and collaboration with others (Benammar, 2004; Dewey, 1933; Mezirow, 1991; Moon, 2004; Schön, 1983).

• **Disappointing** results of reflection assignments implemented in teacher education (see e.g. Abou Baker El-Dib, 2007; Lee, 2005; Mena, García, & Tillema, 2011a).
Guided reflection

• Effective method for developing practical knowledge
• Taking in to consideration actions, thought and feelings
• Requires active involvement
• Is more effective in interaction with others
Research questions

• What **practical knowledge types** student teachers communicated in their *oral and written* reflections?

• Are there **differences** in created practical knowledge between students in **different teacher education curricula**?

• How do the groups in **three oral reflection conditions** (reflecting alone, reflecting with a peer, and reflecting with a school supervisor) **differ** in terms of created practical knowledge?
Participants

- Participants: 21 student teachers (with different prior pedagogical experience)

- Curricula: subject teacher in basic education, class teacher, kindergarten teacher curriculum
Guided reflection procedure

1. VIDEOTAPED LESSON
   - Classroom events
   - Done by student teacher at classroom
   - Focus on teacher's action

2. VIDEOTAPING
   - Incident
   - Incident
   - Incident

3. INDEPENDENT REFLECTION
   - What happens during the lesson?
   - What are the most important incidents (2) for you during the lesson?
   - Why?
   - max 2 days

4. 2 CRITICAL INCIDENTS:
   - Positive, empowering
   - Challenging, difficult

5. Classroom events chosen by the student teacher according to her/his aims for teaching practice

6. A) INDEPENDENT REFLECTION or B) PEER REFLECTION
   - What is happening in this incident?
   - Why do you think this is happening?
   - Relating the incident to theory
   - max 1 week
   - What have you learnt from this process so far?
   - How do you intend to implement these insights in your future teaching?

7. WRITTEN REFLECTION IN POFO/REPORT
   - At the end
   - What is happening in this incident?
   - Why do you think this is happening?
   - Relating the incident to theory
   - What have you learnt from this process so far?
   - How do you intend to implement these insights in your future teaching?
Data collection and analysis

• Data: transcriptions of **oral reflections (three conditions)**, written reflections

• Data analysis:
  – **qualitative content analysis** procedure
  1) Recalls
  2) Appraisals
  3) Rules and practical principles
  4) Artefacts
  5) Practical reasoning
  6) Theoretical reasoning

  – **chi-square test**
Main findings of the study

1) Practical knowledge communicated in oral and written reflections

<table>
<thead>
<tr>
<th>Reflection phase</th>
<th>Practical knowledge type</th>
<th>Recalls</th>
<th>Appraisals</th>
<th>Rules</th>
<th>Artefacts</th>
<th>PR</th>
<th>TR</th>
<th>Total number of fragments</th>
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<tr>
<td>Oral reflection</td>
<td>Count</td>
<td>135</td>
<td>101</td>
<td>118</td>
<td>33</td>
<td>222</td>
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<td>-3.3</td>
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<td>143</td>
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<td>436</td>
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<tr>
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<td>1057</td>
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</table>

$\chi^2 = 99$, $p < 0.01$

PR – practical reasoning
TR – theoretical reasoning
Main findings of the study

2) Differences in created practical knowledge between students in different teacher education curricula

\[ \chi^2 = 32, \ p < 0.01 \]

PR – practical reasoning
TR – theoretical reasoning

<table>
<thead>
<tr>
<th>Curriculum</th>
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<td></td>
<td>Recalls</td>
<td>Appraisals</td>
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<td>Kindergarten teachers</td>
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<td>Class teachers</td>
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<td>Subject teachers</td>
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<td>140</td>
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</tbody>
</table>

PR – practical reasoning
TR – theoretical reasoning
Main findings of the study

3) Differences in created practical knowledge between students in different oral reflection conditions

<table>
<thead>
<tr>
<th>Oral reflection condition</th>
<th>Practical knowledge type</th>
<th>Count</th>
<th>Appraisals</th>
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<th>Artefacts</th>
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<td>436</td>
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\[ \chi^2 = 30, \ p < 0.05 \]

PR – practical reasoning

TR – theoretical reasoning
Conclusions and implications for practice

• Oral reflections allow detailed revisiting of the concrete incident, written reflections permit students to move on to more generalized knowledge from the concrete experience.

• The developed procedure could be more suitable for students with some prior pedagogical experience.

• The developed procedure is more beneficial if the oral reflection is carried out with an experienced supervisor or a peer student.
Thank you!

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