Guided Reflection Procedure: A Way to Enhance Student Teachers’ Enactment and Learning from Practice

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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).

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

- Student teachers should adopt reflective skills and practical knowledge as well as practical capabilities during teacher education for their professional work as teachers (Kansanen et al., 2000; Mena et al., 2012; Toom et al., 2010).


- Video learning during teaching practice as an opportunity to foster teacher learning (Connell, 2009; Feiman-Nemser, 2001; Flores & Day, 2006).
Aims and research questions

• The aim of the study is to promote student teachers’ learning, reflection and construction of practical knowledge during teaching practice in teacher education and to test the procedure of guided reflection with student teachers in five different teacher education contexts.

• Research questions
  1) What knowledge types do student teachers express in their oral and written reflections?
  2) What is the role of mentor teachers and peer students in the process?
Participants and data

- In total, **309 student teachers** from Estonia (57), Finland (53+73), The Netherlands (64), and Spain (70)
- **Different teacher education curricula** (kindergarten teacher students, primary teacher students, subject teacher students)

Student teachers’ video recorded lessons from teaching practice:
- student teachers identified **a challenging and an empowering meaningful event** (cf. Tripp, 2012) from the lesson;
- student teachers carried out an **oral reflection** on the selected meaningful events (self-dialogue, peer dialogue, or supervisor dialogue);
- student teachers **wrote an reflection** on the selected meaningful events (individual assignment);
- the reflections were analysed by utilising **the framework of practical knowledge**.

- **Chi-square tests** were used to compare the distributions of the types of practical knowledge in different oral reflection conditions and types of reflections.
Data collected using the guided reflection procedure (ACTTEA 2012-2015)

**VIDEO TAPED LESSON**
- Classroom events

**VIDEO TAPING**
- Done by student teacher at classroom
  - max 2 days

**INDEPENDENT REFLECTION**
- What happens during the lesson?
- What are the most important incidents (2) for you during the lesson? Why?

**2 CRITICAL INCIDENTS:**
- Positive, empowering
- Challenging, difficult

**INDEPENDENT REFLECTION**
- Classroom events chosen by the student teacher according to her/his aims for teaching practice

**WRITTEN REFLECTION IN POFO/REPORT**
- At the end

**A) INDEPENDENT REFLECTION**
- What happens in this incident?
- Why is this incident important and meaningful?
- What is the more general meaning of this incident in a wider context?

**B) PEER REFLECTION**
- What will you do with that you have understood?

**C) REFLECTION WITH SUPERVISOR**
### The framework of practical knowledge utilised in the analysis of reflection data

(Fenstermacher, 1994; Mena & Clarke, 2015; Toom, 2012)

<table>
<thead>
<tr>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recalls</strong></td>
</tr>
<tr>
<td><strong>Appraisals</strong></td>
</tr>
<tr>
<td><strong>Rules or practical principles</strong></td>
</tr>
<tr>
<td><strong>Artefacts</strong></td>
</tr>
<tr>
<td><strong>Practical reasoning</strong></td>
</tr>
<tr>
<td><strong>Theoretical reasoning</strong></td>
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</tbody>
</table>
Results (1): Types of practical knowledge in reflections*

<table>
<thead>
<tr>
<th>Types of practical knowledge</th>
<th>Rule or practical principle</th>
<th>Artefact</th>
<th>Practical reasoning</th>
<th>Theoretical reasoning</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>WR Frequency (%)</td>
<td>59 (14)</td>
<td>39 (9)</td>
<td>143 (33)</td>
<td>54 (12)</td>
<td>436 (100)</td>
</tr>
<tr>
<td>SR -3.4</td>
<td>-3.5</td>
<td>5.1</td>
<td>4.1</td>
<td>-4.3</td>
<td>5.2</td>
</tr>
<tr>
<td>OR Frequency (%)</td>
<td>135 (22)</td>
<td>101 (16)</td>
<td>118 (19)</td>
<td>33 (5)</td>
<td>621 (100)</td>
</tr>
<tr>
<td>SR 3.4</td>
<td>3.5</td>
<td>-5.1</td>
<td>-4.1</td>
<td>4.3</td>
<td>-5.2</td>
</tr>
<tr>
<td>Total</td>
<td>194 (18)</td>
<td>140 (13)</td>
<td>261 (25)</td>
<td>87 (8)</td>
<td>1057 (100)</td>
</tr>
</tbody>
</table>

WR – written reflections
OR – oral reflections
SR – standardized residual

χ² = 93.9, p < 0.01; df=5

* An example from Estonian data
Results (2): The role of mentor teachers and peer students in the process

<table>
<thead>
<tr>
<th>Type of practical knowledge</th>
<th>Rule or practical principle</th>
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<th>Practical reasoning</th>
<th>Theoretical reasoning</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self reflection SR</td>
<td>82 (17)</td>
<td>73 (16)</td>
<td>93 (20)</td>
<td>41 (9)</td>
<td>147 (32)</td>
</tr>
<tr>
<td>Peer reflection SR</td>
<td>56 (17)</td>
<td>44 (14)</td>
<td>95 (30)</td>
<td>22 (7)</td>
<td>94 (29)</td>
</tr>
<tr>
<td>Supervisor reflection SR</td>
<td>56 (21)</td>
<td>23 (8)</td>
<td>73 (27)</td>
<td>24 (9)</td>
<td>83 (31)</td>
</tr>
</tbody>
</table>

Total Frequency (%)

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SR – standardized residual

$\chi^2 = 21.0, p < 0.05; df=10$

* An example from Estonian data
Conclusions and discussion

• The presented **guided reflection procedure** aids student teachers in **constructing their own knowledge** grounded in and from their **practical experiences**.

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

• **Mentor teachers** and **peer students** have a **crucial role** in learning from teaching practices on entering the profession.

• The procedure could be used in teacher education to **facilitate student teacher learning** and **structure reflection**.
Thank you for your attention!

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