PRE-SERVICE TEACHERS’ PRACTICAL KNOWLEDGE AS EMERGED FROM TEACHING LESSONS IN THE PRACTICUM

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Theoretical Background

Understanding the practical knowledge teachers locally construct from direct classroom experiences is growing in relevance in Teacher Education.

-Besides: teachers are the ones who translate theoretical notions into their practice (Elbaz, 1981; Clandinin, 1985)

Therefore

Eliciting teachers’ practical knowledge, through conversations (Hennissen & Crasborn, 2008), concept mapping or interviews (Meijer, Verloop & Beijard, 1999; Meijer, Zanten & Verloop, 2002) further helps Student Teachers (STs) to better make sense of the profession.
**Context**

The present study draws on a wider European research Project (2012-2015) in which four participant countries (Finland, Estonia, The Netherlands and Spain) jointly study the way STs learn relevant professional knowledge in the practicum setting.

**Objectives**

The project focuses on supporting student teachers in developing knowledge based on their practical experiences.

More specifically:
- revealing the strategies, rules or principles for practice i.e. practical knowledge or *action-oriented knowledge* that teacher Candidates (TCs) use during the practicum experience.
Research questions

1) Which forms of knowledge are emphasized in the TCs’ reflection during the practicum?

2) Which forms of reflection are emphasized in various contexts (individual, peer, supervisor?)
Participants
Eighty-seven STs participated in the first year study.

*Besides:*
- 34 School advisors (i.e. class teachers, subject teachers, special education teachers)
- 6 Faculty Advisors.

Data collection
Video recordings, oral and written reflections → *procedure of guided reflection*

Analysis
Comparative data from all the contexts.
Critical incidents and types of practical knowledge.
The Guided Reflection Procedure  
(ACTTEA 2012-2015)  

**1. VIDEOTAPING**  
Done by student teacher at classroom  
Focus on teacher's action

**2. CRITICAL INCIDENTS**  
What happens during the lesson?  
What are the most important incidents (2) for you during the lesson?  
Why?

**3. A) INDIVIDUAL REFLECTION**  
B) PEER REFLECTION  
C) REFLECTION WITH SUPERVISION

**WRITTEN REFLECTION REPORT**  
At the end

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

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

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**VIDEOTAPED LESSON**  
Classroom events

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What happened during the lesson?  
What are the most important incidents (2) for you during the lesson?  
Why?

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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?

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What happened in this incident?  
Why do you think this would happen?  
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?
### Types of action-oriented knowledge

(Mena, García, Clarke & Barkatsas, 2015; Toom, 2012).

<table>
<thead>
<tr>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recalls</strong></td>
<td>Direct reproductions of what has been experienced, that is to say, images from the lesson as recalled from memory.</td>
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<tr>
<td></td>
<td>“I changed the classroom distribution twice”.</td>
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<tr>
<td><strong>Appraisals</strong></td>
<td>Constitute evaluations or value judgments of the action that is being recalled.</td>
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<td></td>
<td>“The round of questions was difficult because the students had not reviewed the contents”</td>
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<tr>
<td><strong>Rules or practical principles</strong></td>
<td>Methodological strategies that student teachers extract from their experiences.</td>
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<td></td>
<td>“It is important that pupils understand the story plot by associating each character with a single attribute”.</td>
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<tr>
<td><strong>Artefacts</strong></td>
<td>Instruments and physical supports teachers envisage from what they have experienced.</td>
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<td></td>
<td>“I would repeat the explanation at least twice: one at the beginning of the class and another one once they have done the exercises.”</td>
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<td><strong>Practical justifications</strong></td>
<td>Teachers give practical arguments for their claims based on their experiences.</td>
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<td></td>
<td>“I called the pupil by name during the lesson, because it was the only possible way to gain her attention.”</td>
</tr>
<tr>
<td><strong>Theoretical justifications</strong></td>
<td>Teachers give theory-related arguments for their claims based on their experiences.</td>
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<td></td>
<td>“I asked questions related to the math task, because I know that it is one way to guide pupil within her zone of proximal development.”</td>
</tr>
</tbody>
</table>
### RESULTS

Part of the results

<table>
<thead>
<tr>
<th></th>
<th>Recall</th>
<th>Appraisals</th>
<th>Rules</th>
<th>Artifacts</th>
<th>Practical Reasoning</th>
<th>Theoretical Reasoning</th>
<th>Total Number of fragments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Individual reflection</strong></td>
<td>41 (14.38%)</td>
<td>26 (9.12%)</td>
<td>19 (6.66%)</td>
<td>18 (6.31%)</td>
<td>0 (0%)</td>
<td>3 (1.05%)</td>
<td>107 (37.54%)</td>
</tr>
<tr>
<td><strong>Peer reflection</strong></td>
<td>48 (16.84%)</td>
<td>27 (9.47%)</td>
<td>5 (1.75%)</td>
<td>4 (1.40%)</td>
<td>5 (1.75)</td>
<td>0 (0%)</td>
<td>89 (31.22%)</td>
</tr>
<tr>
<td><strong>Mentor-guided reflection</strong></td>
<td>40 (14.03%)</td>
<td>21 (7.36%)</td>
<td>10 (3.5%)</td>
<td>14 (4.91%)</td>
<td>2 (0.70%)</td>
<td>2 (0.70%)</td>
<td>89 (31.22%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>129 (45.26%)</td>
<td>74 (25.96%)</td>
<td>34 (11.92%)</td>
<td>36 (12.63%)</td>
<td>7 (2.45%)</td>
<td>5 (1.75%)</td>
<td>285 (100%)</td>
</tr>
</tbody>
</table>
CONCLUSIONS

- Main results indicate that MTs or peers DID NOT prompt the CTs to infer more generalizable and abstract forms of knowledge (i.e. rules of practice, artefacts and justifications).
- The developed procedure is more beneficial (in terms of explicative knowledge) if it is carried out with an experienced supervisor or a peer student (Collaborative reflection).
Thank you!

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This communication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.
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<th>Work packages</th>
<th>Intended</th>
<th>Actions</th>
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<td>WP1</td>
<td>Project meetings and website</td>
<td>Lead and monitor the project</td>
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<tr>
<td>WP2</td>
<td>Implementation of the guided reflection/ supervision procedures</td>
<td>Testing various ways to analyze the data. Using the Guided Reflection Procedure in practice.</td>
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<tr>
<td>WP3</td>
<td>Quality assurance</td>
<td>Periodical assessment reports on the project.</td>
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<td>WP4</td>
<td>Video Library</td>
<td>Creation of a virtual platform to upload video excerpts of TCs’ performance.</td>
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<td>WP6</td>
<td>Dissemination</td>
<td>Participation in national and international conferences. Papers.</td>
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<tr>
<td>Types of reflection</td>
<td>Practical Knowledge types</td>
<td>Oral reflection</td>
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<td>---------------------</td>
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<tr>
<td></td>
<td></td>
<td>Recalls</td>
</tr>
<tr>
<td></td>
<td></td>
<td>135 (12.71%)</td>
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<tr>
<td></td>
<td></td>
<td>59 (5.58%)</td>
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<tr>
<td>Total</td>
<td></td>
<td>194 (18.35%)</td>
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