Student teachers’ practical knowledge emerging from their school practice

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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, concept mapping or interviews (Meijer, Verloop & Beijard, 1999; Meijer, Zanten & Verloop, 2002) further helps Student Teachers (STs) to better make sense of the profession.
Rationale & Purpose

Context

The present study draws on a wider European research Project 526318-LLP-1-2012-1-EE-COMENIUS-CMP (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 ACTTEA Project focuses on supporting student teachers in developing knowledge based on their practical experiences.

More specifically:
- revealing the effective strategies, rules or principles for practice i.e. practical knowledge or action-oriented knowledge that teacher Candidates (TCs) use during the practicum experience.
- Underpinning the relevance of the TCs’ initial teacher education, so that they would be better prepared for a real life work situations.
Research questions

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

2) Which forms of reflection are emphasized in various contexts?
METHODODOLOGY

Participants
Eighty-seven STs participated in the first year study.

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

Data collection
Video recordings, oral and written reflections\(\rightarrow\) *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)

VIDEOTAPED LESSON
- Classroom events

VIDEOTAPING
- 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?

max 1 week

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

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

A) INDEPENDENT REFLECTION
- B) PEER REFLECTION
- C) REFLECTION WITH SUPERVISION

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?

At the end

WRITTEN REFLECTION IN POFO/REPORT
- 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?
<table>
<thead>
<tr>
<th>Types of action-oriented knowledge</th>
<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>
<td>“I changed the classroom distribution twice”.</td>
</tr>
<tr>
<td><strong>Appraisals</strong></td>
<td>constitute evaluations or value judgments of the action that is being recalled.</td>
<td>“The round of questions was difficult because the students had not reviewed the contents”.</td>
</tr>
<tr>
<td><strong>Rules or practical principles</strong></td>
<td>Methodological strategies that student teachers extract from their experiences</td>
<td>“It is important that pupils understand the story plot by associating each character with a single attribute”.</td>
</tr>
<tr>
<td><strong>Artefacts</strong></td>
<td>instruments and physical supports teachers envisage from what they have experienced</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>
</tr>
<tr>
<td><strong>Practical justifications</strong></td>
<td>Teachers give practical arguments for their claims based on their experiences</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>
<td>“I asked questions related to the math task, because I know that it is one way to guide pupils within her zone of proximal development.”</td>
</tr>
</tbody>
</table>

(Mena, García, Clarke & Barkatsas, *forthcoming*; Toom, 2012; Fenstermacher, 1994). As presented in AERA 2014 (Knezic et al., 2014)
### RESULTS

Part of the results

<table>
<thead>
<tr>
<th>Types of reflection</th>
<th>Practical Knowledge types</th>
<th>Oral reflection</th>
<th>Written reflection</th>
<th>Total Number of fragments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>135 (12.71%)</td>
<td>101 (9.55%)</td>
<td>621 (58.75%)</td>
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<tr>
<td></td>
<td></td>
<td>118 (11.16%)</td>
<td>143 (13.52%)</td>
<td>261 (24.69%)</td>
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<td></td>
<td>33 (3.11%)</td>
<td>54 (5.10%)</td>
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<tr>
<td></td>
<td></td>
<td>222 (21.00%)</td>
<td>120 (11.35%)</td>
<td>324 (30.65%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12 (1.13%)</td>
<td>39 (3.68%)</td>
<td>51 (4.82%)</td>
</tr>
<tr>
<td>Recalls</td>
<td></td>
<td>194 (18.35%)</td>
<td>140 (13.34%)</td>
<td>1057 (100%)</td>
</tr>
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<td>Appraisals</td>
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***Data taken from the Estonian sample. In Leijen et al. (2014)***
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<tr>
<td></td>
<td>Recalls</td>
<td>Appraisals</td>
</tr>
<tr>
<td>Individual</td>
<td>26 (5.96%)</td>
<td>33 (7.56%)</td>
</tr>
<tr>
<td>With peer</td>
<td>17 (3.89%)</td>
<td>4 (0.91%)</td>
</tr>
<tr>
<td>With Supervisor</td>
<td>16 (3.66%)</td>
<td>2 (0.45%)</td>
</tr>
<tr>
<td>Totals</td>
<td>59 (13.53%)</td>
<td>39 (8.94%)</td>
</tr>
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***Data taken from the Estonian sample. In Leijen et al. (2014)***
CONCLUSIONS

• Main results indicate that MTs or peers prompted the CTs to infer more generalizable and abstract forms of knowledge (i.e. rules of practice, artefacts and justifications) whereas STs on their own displayed more of narrative knowledge (i.e. recalls, appraisals and justifications).

• The developed procedure is more beneficial if is carried out with an experienced supervisor or a peer student.
¡O Brigado!

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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.