ENHANCING STUDENT TEACHERS’ REFLECTION FOR ACTION ORIENTED KNOWLEDGE IN TEACHING

ACTTEA 2012-2015

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Develop teaching practices that are effective in enabling teachers to acquire knowledge and skills they need.

The case ‘everywhere’: theory-practice problem(s) – i.e. how to construct multiple connections between
- observations and generalizations
- teaching and student/teacher learning

How student teachers move from their simplistic explanations towards more sophisticated explanations of their actions
- Teacher learning (in classrooms and in teacher education)
- Teacher reflection (of action oriented knowledge of their practice)
- Teacher agency (i.e. something has to be done in order to make an effect)
Aims in the ACTTEA project:
- The research interest is in the interaction between student teacher learning and pedagogical practices in TE
- The specific focus is on student teachers in developing knowledge based on their practical experiences.
  - Student teachers will be supported to find the most effective strategies, rules or principles for teaching practice, i.e. action-oriented knowledge (Mena Marcos, 2011)

Research questions in this presentation:
- What kind of critical incidents do the student teachers perceive meaningful in their classroom practice?
- How do the student teachers experience the procedure of guided reflection and use of videos?
Active, persistent, and careful consideration of any belief or form of knowledge (Dewey, 1933)

Rigorous, intellectual, and emotional enterprise that takes time (Dewey, 1933)

Meaning-making process that moves a learner from one experience into next with a deeper understanding of its' relationships (Rodgers, 2002)

All kinds of reflection: reflection in, and on, and for action → tool in continuous construction of teacher’s knowledge (Fenstermacher, 1998; Eraut, 1995; Mena Marcos, 2011)

Teaching practice: beliefs about self, classroom teaching, and pupils’ learning are integral part of a teacher’s personal epistemology (Baxter Magolda, 2004)
The problem is how to extract meanings from experiences.

Teacher reflection tends to reinforce existing beliefs rather than challenge assumptions (Mena Marcos et al., 2009, 2012).

We believe that being reflective has a sort of transformative power → being reflective as "methodological virtue" or "superior insight" (Lynch, 2000).

Reflective analysis does not come naturally.

The role of guidance – to test the habits of thinking and action.

Learning in/from teaching practice contributes effectively to establishment of professional knowledge.
THE PROCEDURE OF GUIDED REFLECTION DURING TEACHING PRACTICE IN TE (ACTTEA 2012-2015)

VIDEOTAPEd LESSON

Classroom events

VIDEOTAPEING
Done by student teacher at classroom

max 2 days

INDEPENDENT REFLECTION

Focus on teacher's action

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

Incident
Incident
Incident
Incident

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

At the end

A) INDEPENDENT REFLECTION

or

B) PEER 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?

WRITTEN REFLECTION IN POFO/REPORT

What happens in this incident?
Why is this incident important and meaningful?
How has this incident affected to your thinking and actions?
What is the more general meaning of this incident in a wider context?
What will you do with that you have understood?
PARTICIPANTS

- Student teachers (class teachers, subject teachers, special education teachers: n=250)

- School teachers supervising student teachers in their classes (n=50)

- University supervisors (n=50)

→ Comparative data from all the contexts
→ Video library to be used in TE
DATA ANALYSIS

- Broader content analysis ⇒ themes: a content unit of analysis to determine what the critical event is about.
  - Video recorded critical incidents

- A more detailed analysis of action-oriented knowledge ⇒ topics: semantic units that contains a unit of thought.
  - To be used in the 2nd set of data (conversations)
  - To be used in the 3rd set of data (written reflections)
INSTRUCTIONAL ELEMENTS AND PROCESSES: A FRAMEWORK FOR VIDEO DATA ANALYSIS

RESULTS (I): CRITICAL VIDEO INCIDENTS

PEDAGOGICAL RELATION
- Peaceful start of the lesson [+N2äi1]
- Maintaining a safe atmosphere during pupils’ blackboard work [+M1ma1]
- Pedagogical action as teacher [+N3bg2]

DIDACTICAL RELATION
- Clear introduction of the lesson [+N1äi1]
- Motivating the pupils in an engaging way [+N8ma]
- Careful and detailed instructions [+N7äi]
- Teaching specific content for pupils [+N4äi1]
- Using the demonstration materials in teaching of an individual pupil [+M1ma2]
- Play as a teaching method of the specific content [+N5äi1]
- Activating teaching methods during the lesson [+N6äi1]
- Challenge of managing and teaching certain contents [-N3, bg1]
- Unclear instructions for the pupils [-N5äi2]
- Explaining the tasks unclearly for the pupils [-N6äi2]

CONTENT RELATION
- Confusion when teaching certain content [-N4äi2]
- More thorough understanding of the contents of teaching [-N8ma]
“We realized how important the preparations are for the successful lesson. The feeling of control relieved and made us feel more relaxed when we gave instructions for pupils and spoke spontaneously. Good atmosphere in the beginning continued during all the lesson and it could be observed also from the video both in our actions as well as pupils’ actions.” [N1N2äi]

"I really make all the "classical mistakes" in teaching of planetaric phenomena. First, I assume that pupils self-evidently know about the topic and evaluate them as learners. Some pupils’ gestures told me very quickly that the division of radiation on the Earth is not clear for them. I realized my evaluative comment myself on that moment as well. I awoke and tried to correct the influence that my comment could have on pupils’ self-esteem, and also teach the phenomenon in a more simple and repetitive manner.” [N3bg]

"When I demonstrate the phenomenon for the pupils, I seem to become enthusiastic about the situation. My presence shows that I am interested in the theme I am teaching and I remember that my positive body language also transferred to pupils. It is also partly seen from the video. When I teach, I aim at assuring the pupils through my gestures and body language that the topic being taught is interesting and worth enthusiasm and learning. [N3bg]

It was extremely nice to notice a couple of pupils from the video, who normally never are willing or interested to participate to any activities together, were really engaged to the rhythm play. I believe that pupils enthusiasm towards the action was partly related to my will and enthusiasm to lead the play. [N5äi]
We both highly value the child-centered pedagogy, and set it as one of the goals for our teaching practice. From the video we observed and got evidence for our feelings that we are really going to the right direction. We have discussed and reflected on our professional development and teacher identity, and it has been quite abstract, because we do not have any teaching experience. Now, after watching the video we know more about our personal characteristics as teachers and about the directions towards which we are willing to develop, learn and grow. [N1N2äi]

In the future I will clarify more thoroughly and better that where the pupils are actually going, and make use of pupils’ previous knowledge in teaching, so that they really understand and. I hope that I would learn to identify such themes that require more structured and teacher-centered pedagogy and separate them from those that could be done through project work etc. [N4äi]
GUIDED REFLECTION IN PRACTICE: STUDENT TEACHERS’ FEEDBACK

Benefits
+ Positive attitudes
+ Useful experience
+ The use of video in remembering the lesson
+ Interaction
+ A way to develop pedagogical thinking and action also in the future

Challenges
- Too detailed planning
- Confusion caused by videoing
- The difficulties in expressing one’s thoughts and actions
- Limited possibilities to apply new understandings in practice

Suggestions
- More videoed lessons
- Occasional videoing
- Use of videos already in previous practice periods
- The possibilities to apply new understandings in practice
student teachers’ should
- be provided with the broad abilities to reflect on the professional matters of teaching
- be able to question their practices, identify social and cultural constraints and/or facilitators, and they are visioning their work into future
- be able to construct their pedagogical agency as future professional teachers through the consideration of their teaching

with the procedure, it is possible
- to deeply perceive, analyze, and reflect on professional performance
- to guide and differentiate reflective judgments
- to develop professionally