

PROFESSIONAL DEVELOPMENT LEADERS' PRIORITIES OF CONTENT AND THEIR VIEWS ON PARTICIPANT-ORIENTATION

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Those, who provide PD courses, the facilitators, are crucial for scaling up professional development (PD), because even if PD courses are jointly developed, the facilitators' realizations vary according to their priorities and professional views. However, little empirical insights exist into these choices and underlying views. The paper presents excerpts of a qualitative interview study that investigates how eleven facilitators select and adapt the contents of a PD course for facilitators and how they justify these choices by different interpretations of the design principle participant-orientation. Empirical findings are presented about different priorities of forms of knowledge, being bound to varying views of participant-orientation. These results contribute to an empirically grounded knowledge base for professionalizing facilitators and for enhancing processes of scaling up.

BACKGROUND: FACILITATORS IN SCALING UP PROFESSIONAL DEVELOPMENT

Even if innovations for mathematics classrooms are designed together with some teachers, professional development for other teachers is required for spreading the innovation beyond the group first involved. Usually more professional development courses are required than the designing researchers and teachers can offer themselves. Then, the *cascade model of scaling up* (Maaß & Artigue 2013) can be used, in which facilitators are prepared for conducting PD courses (Borko et al. 2014).

Whereas well-established research findings exist on design principles for effective PD courses (e.g. Timperley et al. 2007), the processes of scaling up with facilitators are not yet systematically investigated: “the issue of ‘scale’ is a key challenge for school reform, yet it remains undertheorized in the literature” (Coburn 2003, p. 3). The presented study investigates one aspect in the cascade model, the facilitators' individual selection of contents, in order to contribute to the necessary process of theorizing. The empirical analysis will show that facilitators ground their decisions on the design principle of participant-orientation, according to which teachers' backgrounds and needs must be taken into account (cf. Timperley et al. 2007), but do it in quite different ways.

This research interest on facilitators' priorities and views is motivated by a transfer from research on teachers' adaptation processes to facilitators: just like teachers adapt curriculum materials to their own classes by selecting or differentially emphasizing certain contents (e.g. Sherin & Drake 2009), facilitators adapt PD materials to their own PD course and select or foreground some contents, partly with respect to the teacher group and their specific context, partly with respect to personal choices and professional views.

RESEARCH CONTEXT AND RESEARCH QUESTIONS

The study is one part of a larger project situated in the DZLM (German Center for math teacher education), aiming at understanding conditions of scaling up in the cascade model. The facilitators in view are involved in the large-scale network KOSIMA, belonging to a curriculum project for middle schools. More than 40 facilitators have engaged in the network since at least 15 months.

The PD course offers three forms of knowledge (Cochran-Smith & Lytle 1999) on the topic “Dealing with heterogeneity in math classrooms”: Knowledge-*in*-practice (consisting of concrete examples for differentiating tasks and activities), knowledge-*for*-practice introduced by the facilitator (design principles for tasks and categories for distinguishing and reflecting on strengths and limits of different activities) and knowledge-*of*-practice (reflecting on strengths and limits of different activities), developed during the courses when experimenting with new activities in the own classroom and discussing it in the next session.

In order to prepare the facilitators for PDs with the course material and its pedagogy, two workshops were conducted in which the course content (concrete classroom activities and categories for dealing with heterogeneity), design principles for the PD course and thematic backgrounds were discussed. The facilitators adapted the PD courses for teacher groups with whom they worked in various middle schools. Within this research context, an interview study was conducted on facilitators’ choice and views. This brief paper focusses on two research questions:

(Q1) How do facilitators select or prioritize contents for the PD courses?

(Q2) How do they justify their priorities with respect to the principle of participant-orientation?

METHODOLOGY OF THE STUDY

Data gathering. For pursuing these research questions, the first and second author conducted individual semi-structured interviews (of 45-120 minutes each) with n=11 facilitators, based on materials of the PD courses (concretely: the structure, the important elements, specific foci, used examples and cases). The interview questions dealt with the general design of their PD-course, their knowledge and interpretation of the content “dealing with heterogeneity in mathematics classrooms”, its perceived relevance for teachers and the facilitator himself. Furthermore, we simulated a planning process of a PD-course.

Data analysis. The interviews were completely audio-taped and partly transcribed. A qualitative content analysis (Mayring 2015) was conducted by paraphrasing aspects according to the research questions. In utterances on the selection of contents, underlying views on participant-orientation were reconstructed by systematic comparison of cases.

RESULTS: PRIORITIES ON FORMS OF KNOWLEDGE BASED ON DIFFERENT VIEWS OF PARTICIPANT-ORIENTATION

All eleven facilitators also deal with reasons for thematic choices (e.g. diversity of strategies versus diversity of attainment level), but the most striking observation concerned the different priorities on forms of knowledge as become visible by contrasting three excerpts of interviews of Greg (an experienced teacher with little experiences as facilitator), Marc (a former teacher now working in university contexts as experienced facilitator) and Julia (experienced facilitator and teacher).

Greg: “Then the colleagues asked if I do not have an example [...] I say like this, I realized it in this and that way, [...] it is feasible like that or these are the obstacles. And yes – these are my experiences as facilitator – if you come with these experiences, then you get acceptance [...] not any theoretical – ehm – palaver, but how you realize it.”

Also in other parts of the interview, Greg mentions teachers’ limited acceptance for general categories or background information, and justifies his priorities for the concrete examples with the participants’ interests. Marc also refers to the teachers’ interest for concrete examples, but distances himself from it by stressing other aims:

Marc: “this [only working with concrete examples of activities] always stays on one level [...] that does not satisfy me because [...] the tasks alone do not make the teachers independent [...] with it, they cannot develop own tasks [...] I also feel that and I completely understand when teachers do not immediately like the considerations I introduce. Because I know they cannot immediately include that [into their thinking]. Of course, it is our task to mediate in a way that they like it directly, but this is sometimes difficult in practice.”

Although Marc accepts the teachers’ interest for knowledge-*in*-practice (here concrete tasks and activities), he wants them to transcend this form of knowledge for gaining independence in classrooms. For this aim, he considers knowledge-*for*-practice as important, to which he counts the categories for tasks and activities as a background for own task construction. Hence, Marc interprets participant-orientation as a task of mediation between subjective interests and factual needs of teachers. In contrast, Greg divides into theoretical and practical knowledge without taking into account the relevance of categories for practical questions, as knowledge-*for*-practice. In consequence, Greg’s view of participant-orientation leads him to prioritize only the examples. Julia provides an example for harmonizing both motives:

Julia: “I would choose the approach to ask the participants to write down all their strategies for differentiating, which ones they know. And then, we cluster them and realize [...] there are different categories [... needed].”

Whereas Marc intends to mediate between teachers’ interests and the knowledge-*for*-practice without exactly knowing how (“difficult in practice”), Julia adopts an inductive teaching strategy in which the categories to be learnt emerge from clustering own approaches. In another moment of the interview, she also refers to presenting new ideas as solutions for problems mentioned by the participants. These inductive strategies correspond to another view on participant-orientations: Do not let the participants alone choose the contents to be prioritized, but work with the participants’ experiences, ideas and problems and involve them in brief processes of theorizing in order to connect knowledge-*in*-practice to the knowledge-*for*-practice and later knowledge-*of*-practice.

DISCUSSION AND CONCLUSION

Although the presented interviews study with eleven facilitators is limited in scope and should be extended to more cases and other research contexts, it already provides interesting first answers to the research questions.

(Q1) Facilitators have different priorities for the contents of PD courses. Although the research on PD has emphasized the necessity for reflective and theoretical knowledge (e.g., Timperley et al. 2007, p. 79), as knowledge-*for*-practice as well as knowledge-*of*-practice (developed in action and reflection settings), some facilitators choose to restrict to knowledge-*in*-practice (concrete examples) and their personal knowledge-*for*-practice (experiences with limits and conditions of

success). This seems to be especially crucial for “novice-facilitators”. However, this limitation is an obstacle for the effectiveness of the scaled up PD project. So it is important to understand the facilitators’ motives in order to support them overcoming the obstacles.

(Q2) Those facilitators (such as Greg) who choose to restrict mainly to knowledge-*in*-practice justify their decision by the principle of participant orientation, interpreted as the attempt of the facilitator to let their prioritization of contents be led by the participants’ interest. Other facilitators (such as Marc) know that they have to balance participants’ interests with outside needs and try to mediate between both. This group experiences the principle of participant-orientation as possibly contradicting to the need for knowledge-*for*-practice, imported from research by the facilitator. A third group of facilitators can realize the principle of participant-orientation by reconciling knowledge-*in*-practice and knowledge-*for*-practice with inductive strategies which involve the participants in brief sequences of theorizing. This is promising also with respect to existing findings of effective PD courses (Clarke 1994, Timperley et al. 2007). The third group could interpret participant-orientations as it is originally meant (e.g. Clarke 1994): as respect to individual needs and beliefs, but with the challenge to led the participants further, also to establish knowledge-*of*-practice, offering a base for reflection and well-informed choices in classrooms.

It is an interesting additional observation that the professional views on participant-orientation seem to depend on the facilitators’ self-conception of their individual role: are they mainly a colleague as primus among peers or mainly a teacher educator with authority to decide upon necessary contents? We will follow this observation in further research.

Notwithstanding the further research needs to deepen our empirical understanding of some important connections between priorities and professional views on design principles, we can already conclude that the preparation of the facilitators would reflect more explicitly on the need of different forms of knowledge and would offer the inductive strategy as one way to combine the different forms of knowledge.

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