

Professional behaviour of teacher facilitator: Roles, beliefs and challenges

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Abstract: Professional development (PD) courses are developed by researchers and PD designers who are very often not the persons who conduct the PD course (Borko et al., 2014). The facilitating of teacher educators is commonly the means of scaling up PD courses to in-service teachers. Therefore, the professionalization of in-service facilitators is a goal-directed intervention to promote facilitators' learning and their development of knowledge, as the facilitators' realizations vary according to their professional views and beliefs relating to both, PD programs and teaching practice. However, little empirical insights exist about facilitators' roles as educators and their beliefs. This contribution presents some empirical results concerning the way facilitators perceive their role in the process of adapting the contents in the implementation of a PD program for in-service teachers. The goal of this study was to explore the role of the facilitator, based on the underlying and connected beliefs that were reconstructed.

Keywords: beliefs, professional development, teacher education, roles

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1 Background: Professional development of facilitators

Design principles of content-related professional development (PD) courses for in-service mathematics teachers have become a vivid research area. The professional behaviour and beliefs of facilitators have been identified as an almost blind spot of PD research (Jackson et al., 2015). Some pioneering existing research studies focus on facilitators' professional knowledge (Jaworski & Huang, 2014) and practices (Borko et al., 2014, Jacobs, Seago & Koellner, 2017). Given the consensus on the decisive function of facilitators in the process of scaling up, the present study investigates the professional roles and beliefs of facilitators who teach or coach in-service teachers with the aim of supporting their professional development.

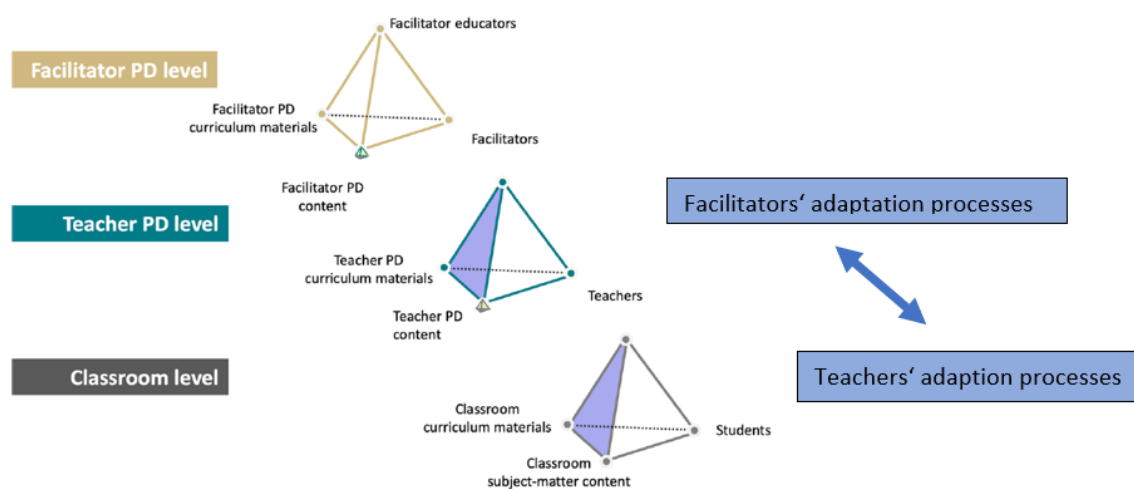
As a first step, the concept of a facilitator will be shortly outlined. Based on a review of the literature, Lunenberg et al. (2014) broadly defined the heterogeneous group of facilitators to consist of teacher educators who are responsible for the continuing professional development of in-service teachers (in contrast to teacher educators for pre-service teachers). Similar to in-service teachers, facilitators face many challenges in order to be able to provide rich learning opportunities for other teachers. They come from different backgrounds and work in different settings of teacher education. Their personal interpretation



of their position as teacher educators is based on expectations from the environment (personal and institutional) which defines the concept of professional role (Dengerink, Lunenberg & Kools, 2015). This definition of the professional role of facilitators should not be mingled with concepts of professional identity (ibid.). Drawing upon analogies between the classroom level and the PD level, the perceived roles of facilitators and their connected beliefs are situated in a theoretical frame which can be based on the three-tetrahedron model for content-related PD research (Prediger et al., 2019, see Figure 1).

Figure 1.

Lifting the research focus on processes from teachers' practices on classroom level to facilitators' practices on teacher PD level.



Learning and especially lifelong learning is and has always been a fundamental business of any activity of professional development in the teaching business. In research about models of teacher professional competence, knowledge as one dimension is complemented by the notion of beliefs (Baumert & Kunter, 2013). As beliefs potentially guide decisions and aspects of practice (Fives & Buehl, 2012), it is therefore significant to encompass beliefs in inquiries about the professional behaviour of facilitators. To lift insightful findings from teachers' practices on the classroom level to facilitators' practices on the PD level, this model serves as a reference point (see Figure 1).

Synthesizing what is known from research about beliefs in education literature, this report adopts Philipp's definition of beliefs as "psychologically held understandings, premises, or propositions about the world that are thought to be true" (Philipp, 2007, p. 259). Beliefs tend to be context dependent and differ from knowledge in that beliefs are thought to be true (while knowledge is known to be true or false). Moreover, beliefs serve as filters through which information is interpreted, influencing what one notices and how one interprets it (Stipek et al., 2001, Philipp, 2007). Thus, beliefs about mathematics and its teaching play an important role in teacher learning and (in-service) teacher professional development.

This research on facilitators' roles and beliefs is motivated by relevant adaptation processes similar to teachers on the classroom level. With their professional knowledge (on both: teacher PD and classroom level; cf. Prediger et al., 2019) facilitators might be seen as experts initiating appropriate learning processes in order to achieve specific targets in their PD sessions. Subjectively expressed beliefs as a part of facilitators' professional competence are of particular importance in trying to better understand what exactly determines their decisions in planning and performing PD sessions (selection of content and methods in PD). These decisions are to a large degree determined by what they think about the PD content and additionally by their individual perceptions and goals.

When facilitating the learning processes of schools and teachers, facilitators may have various roles which may also depend on the relevant expectations of the target group. Distinguishing various professional roles of facilitators, each requiring relevant skills, we mainly use the differentiation of Fransson et al. (2009, p. 80) of the following role descriptions as a starting point:

- Catalysts: who make people move, who bring about change, who inspire.
- Experts: knowledgeable and competent in acquiring or producing new knowledge.
- Problem solvers: who help learners identify and solve problems they are facing.
- Process helpers: who support learners in their learning processes.
- Developers: capable to develop learning environments, material, and tools.

The descriptions above do not completely cover the various roles of facilitators as a role can be an object of discussion. In practice several roles may often be combined. It seems obvious that facilitators indeed combine several roles and role combinations can possibly be a source of tensions, even conflict and modifications, because facilitators have to meet expectations from the setting of PD programs which may sometimes be hard to combine. Facilitators in this study were encouraged to communicate their recognition and their own descriptions of professional roles as in-service educators so that the deductive descriptions above serve as a mirror scope for facilitators' personal interpretation of their role which may then be derived inductively from the data in this study.

2 Research context and research question

With the above considerations in mind, just like teachers who adapt curriculum materials to their learner groups, facilitators select and adapt PD materials to their own PD course within the given setting and context (specific teacher group, content of PD, cf. Dengerink et al., 2015) with respect to their personal choices, professional views and beliefs.

Within this research context, the aim was to examine how PD facilitators perceive their own double-role as educators and learners, and to reconstruct underlying beliefs with respect to their role. Among others in this project, the main research questions addressed in this paper are thus:

1. How do facilitators see their specific role in the PD courses regarding the target group?
2. What are facilitators' beliefs with respect to the implementation of their own PD sessions?

In order to prepare and further qualify the facilitators for their PDs, a qualification course for these facilitators was conducted which consisted of continuous sessions over a period of one and a half years. Facilitators were provided with course material (e.g. classroom activities and categories for dealing with heterogeneity) as well as possible design principles for PD sessions, video studies and relevant research literature.

3 Methodology of the study

For pursuing the research questions, a qualitative survey instrument in the form of a problem-centred interview (PCI), one of many techniques within the landscape of qualitative interviewing, was used as the PCI has an explicit interest in reasons why particular views, opinions or beliefs are prevalent (Witzel & Reiter, 2012). The individual interviews were conducted by the first author with N=10 facilitators, who voluntarily participated in this study. Various clusters of questions concerning relevant subjects (content and goals of particular PD session, self-perception) were used as well as narrative prompts concentrating on making facilitators aware of beliefs by means of reflection on intended action in their PD sessions. To help beliefs emerge with a narrative activity is an approach which has been increasingly applied in the educational field (Dettori & Paiva, 2009) and in mathematics education (Zazkis & Liljedahl, 2009). As an example, one activity in the PCI was a prompt to make participants comment on their priorities and views on design principles (e.g. participant-orientation) of their professional practice in PD sessions which guide their decisions from an individual perspective.

The interviews were transcribed verbatim, and the analysis of the data was done following a descriptive, interpretative conception working with qualitative methods according to established research criteria (Mayring, 2015). Especially an open content analysis seemed to be appropriate to maintain an openness approaching the research object described above. The facilitators' remarks on the selection and prioritization of contents for their PD courses, their strategies, underlying beliefs, and their roles as facilitators were reconstructed by a systematic comparison of cases.

Methodologically the PCI aims to facilitate a structured dialogue which allows to uncover views and perspectives of participants on the particular issue. Additionally, the object orientation on relevant subjects makes it possible to pose follow-up questions and precisely address the research focus (in particular roles and beliefs). The reconstruction of beliefs is thus furthered by the participants' capability and motivation of self-reflection.

4 Result

The results show that all facilitators considered appropriate learning activities and

settings important in prioritizing various adaptations of the PD content resources provided. Facilitators mentioned several issues (e.g. community and context), taking into account holistic challenges and multi-facet complexities of their PD sessions. Identifying specific facilitators' views is always established in various parts of a single interview. We report only facilitators' views that are coherent throughout the whole interview. In general, facilitators have to be able to adopt multiple roles, each requiring a high level of competence and skills (cf. Dengerink et al., 2015). Based on our data, some major roles and connected beliefs have been identified: three roles are highlighted exemplarily, appearing in most of the sample.

Facilitators consider their coaching role as very influential. They see themselves as process helpers who support teachers in their professional learning. In particular, facilitators try to meet the needs of the participants which they first have to analyze and identify themselves:

These are precisely the topics I mean. You come across certain things with participants in your PD sessions, then you can identify problems and possibly move them to reconsider their existing paradigms. And here I can accompany them in this process with research-based approaches. [...] But being a problem solver, no, I wouldn't presume to do that (Mr. R).

In terms of participant-orientation Mr. R. considers different orientations of the participants and intends to mediate between teachers' interests and the need to communicate ideas based on PD resources, encourage reflection, and give productive feedback to participants in their learning community. Facilitators can reflect on their own actions and associated beliefs regarding the limit of one's expertise and area of responsibility, as the example of Mr R. shows, who additionally mentions that he does not see his task description to be a problem solver as a facilitator. In meeting the needs of participants and with an explicit approach in trying to stimulate the learning process with an adaptation of the PD material, a clear belief can be reconstructed that Mr. R sees his role as a cooperating facilitator and coach. Offering research-based knowledge and professional support are key factors for this facilitator and shows that he determines his role as coach in an aspired symbiosis of various points - providing subject matter knowledge, experience in professional support and skillful communication.

The role and belief of a facilitator as a transmitter of input can clearly be found in the data. In their self-perception, some facilitators consider themselves to be competent in producing new knowledge and underline these beliefs with regard to the role as an expert, as the following examples illustrate:

Yes, I am definitely a provider of new ideas and try to give fresh impetus and impulses to my PD participants. [...] Whether this results in any changes in teaching practice it remains to be seen (Mr. S).

...then [I see myself] as a source for transmitting input by raising relevant issues and questions, or stimulate discussions by outlining various teaching scenarios along with a critical reflection (Mr. B).

Both facilitators claim to be an initiator and catalyst who want to bring about change and who want to be a source of inspiration for teachers in their PD sessions. A connected belief to this role is that facilitators draw upon a sound knowledge base and their PD activities seem to be closely linked to the provided PD resources. However, the subjective evaluation of Mr. S. demonstrates the awareness of potential dilemmas between transmitting and PD efficacy. Sometimes facilitators try to model the implementation of both – content and teaching methods – in their PD sessions. Regarded as being particularly effective within the context of a PD session and as an adaptation of the PD material, Mr B. enacted a discussion in one of his sessions about raising student awareness of thinking processes in teachers' classroom lessons:

We want our students to be able to use and choose between different problem-solving strategies, but first they need to learn to generate alternatives for any given mathematical problem or task. So, don't we need to practice that for our own teaching methods in PD? [...] When we design our actual [PD] courses, we must consider the goals and activities so that participants can promote thinking of students by critically considering various pedagogical approaches in actual teaching (Mr. B).

The modelling of learning approaches in PD sessions shows that Mr B. tries to be both – a transmitter of input and an initiator by transferring a specific issue from the discussion in PD sessions into the classroom that is one of his main concerns in professional learning. Thus, it can be reconstructed one of his beliefs is that modelling learning processes is one way of transferring research-based theory into practice. His role as a facilitator certainly includes being an initiator.

The adaptation of curriculum materials and content on the teacher PD level (see tetrahedron model) to the classroom level tries to combine research-based expectations with participating teachers' knowledge of practice. The goal of developing and fostering interactions between facilitator and participants becomes apparent here. The remark about critical reflection shows that Mr B. articulates his role as an initiator to create a community of learning and shows his belief that with an initiated focus on specific PD themes and content, the potential of his PD sessions can lead to consolidated joint insights and product on the classroom level. Of course, this is a case-specific individual perception of being an initiator which is rather questionable in terms of efficacy as can be seen by the remark of Mr S above. It should be noted that both facilitators seem to fulfil the role of a broker in the professional development and learning of in-service teachers. This role implies that a facilitator needs communication and negotiation skills to transfer and mediate curriculum material and content from a PD level to a classroom level using expertise on both levels. Stimulating inquiry and a joint attention on specific themes as a defining feature of the facilitator role as a broker confirm this interpretation (cf. Lunenberg et al., 2014, p.58f).

The participating facilitators in this project are all teachers who still teach at school and work as teacher educators simultaneously. Their task in the institutional context also contains the implementation of PD sessions concerning competence-based teacher education and the transmission of new principles of the curriculum (e.g. core practices). As a linking pin in the transfer of methods and content from research-based design to teacher

adaptation in heterogeneous classroom the facilitators in this project contribute to the necessary process of theorizing and adaptation. However, they do not see themselves in the role as a developer who is capable to supplement materials and tools:

I wouldn't see myself as a developer. I would not have sufficient skill or knowledge to develop materials, but rather implement findings from research into practice (Mrs. K).

With respect to the principle of participant-orientation facilitators stress that they want to fulfil teachers' expectations in their PD sessions and some facilitators rather tend to focus on task examples as a form of transmitting practical knowledge. This does not exclude brief processes of theorizing, but participants in this sample rather hold the belief that their competence profile as a facilitator needs further qualification in this respect. The knowledge domains of facilitators in our sample are dominated by knowledge of practice with a focus on skills and teaching practice as well as an awareness of reflective beliefs and orientations in which facilitators go beyond a mere consideration of teaching skills and core practices towards a better connection between theory and practice. Participating teachers' concerns and needs are more central than compliance issues about curriculum development or enactment in their adaptations of the PD curriculum materials.

...well, if this [being a developer] was successful, this would be really good, but regarding myself this is not a direct objective and certainly this is not covered by my role in the system (Mr. C).

It could be argued that one principle for the design of education curricula is the common principle of linking theory with practice. In a role of being a "seconding developer" the facilitator needs to have a clear vision of the relevant knowledge and professional learning (being acquired on a facilitator PD level → tetrahedron model, see [Figure 1](#)). Then facilitators adapt and model facilitator PD curriculum materials about teaching and learning approaches, which are advocated in the PD program, in their own PD sessions (cf. [Figure 1](#)).

Yet this potential role of a "seconding developer" cannot be found at all in the data of our sample as the quotation from Mr. C. exemplarily shows – with an implied limitation. The potential role of being part of a development process or a developer seems to be restricted by institutional norms and role assignments in the educational system. Further hints of a desired role of being a developer cannot be found in Mr. C.'s interview data. The one given, however, is an indication that an active adaptation process between the different levels in the tetrahedron is taking place. It supports the argument given by Cochran-Smith (2006) who contents that any teacher educator or facilitator is a "public intellectual" who should play an active role in debates and processes about curriculum development and adaptation. Our data rather confirms the hypothesis that in this respect facilitators are more likely to be following the role they have been assigned by education institutions and authorities.

5 Discussion and conclusion

Based on the literature and our findings, it can be said that facilitators in this study consider themselves adopting a role of being professional learners. They achieve to attain an individual level of being a role model in professional learning in which facilitators hold a set of beliefs concerning their roles which they try to organize in a way that makes sense to the individual and is thus subjectively coherent (Leatham, 2006). The different roles, however, imply both, the challenge of how to cope with these and making decisions when a particular role is appropriate in the specific setting of a PD context.

The beliefs of facilitators which could be reconstructed in this sample illustrate a variety of role models and challenges which are perceived and reflected by our participants with different modes of experience in facilitation. The identification of facilitators' roles and beliefs is important in considering the adaptation processes of practices on a teacher PD level (see Figure 1). These beliefs and their connection to enacted PD practices is however a tentative one.

Although the presented study is limited in scope it already provides some interesting answers to the research questions. The results show that all facilitators considered participant-orientation and stimulating cooperation as highly important design principles for their various adaptations of the PD content resources provided. These beliefs and associated role reflection are seen as an important and characteristic competence of facilitators in their capability to incorporate the needs and expectations of in-service teachers (target group) in several stages of the facilitation process. Facilitators usually have different backgrounds and have different paths how they found their way into being in-service teacher educators. All participants of our sample are or have been active classroom teachers and are thus experienced in the profession. As teachers as clients in PD sessions prefer to be supported by someone who knows the profession from the inside, it is an expected result that facilitators subjectively hold beliefs that emphasize their preference for a cooperative setting and want to provide rich learning opportunities for their clients.

Using research-based textbooks and hands-on material was a major facilitator goal to support in-service teachers in coping with heterogeneity in the classroom. Participants see themselves as tutoring process helpers, experts, and transmitters of input, who provide impulses for innovations rather than being problem solvers or developers. This is consistent with their beliefs with respect to their own PD sessions and their roles therein.

What becomes apparent in the data of this study is that facilitators experience various tensions when they report about their beliefs and roles. Combinations of roles and potentially conflicting beliefs can be a source of tensions (Berry, 2007) – be it in teaching at school or in professional development settings. Facilitators must meet various expectations and norms which are sometimes hard to combine. Dilemmas which have been mentioned by participants in this study are: the tension between theory and practice as well as the tension between approaches being advocated in the teacher PD curriculum material (cf. teacher PD level in the tetrahedon model) and their personal adaptation processes in relation to their beliefs and role reflections as an actor in this professional development program. In dealing with such tensions and dilemmas, facilitators require comprehensive theoretical knowledge as well as experience and reflective decisions. By finding the right

balance between the factors causing the tensions, facilitators can make sense of their role of a teacher of teachers.

The limitations of this study are obvious: a small sample of facilitators can only illustrate facilitators' beliefs and roles exemplarily and should be taken as some illuminating cases for investigating significant factors of professional development practices in any other PD context. Overall, the results suggest that further connections between facilitators' competences, their role in adult education, their self-perception, beliefs, and efficacy should be identified in future research.

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