

Identity as experience – an interactionist approach

JEPPE SKOTT

Identity studies tend to draw on participatory frameworks. Some focus on identities on offer in professional development programmes or in general educational discourses; others relate identities to other social worlds and teachers' biographies. I argue that neither pays sufficient attention to identities as they emerge in school and classroom contexts and that supplementary approaches are needed. In this theoretical essay, I present one such approach that defines professional identities as experiences and combines the definition with an interactionist framework, Patterns-of-participation. I argue that this combination allows interpretations of short- and long-term relationships between identities and school and classroom processes.

Research on teachers' professional identities has developed in response to perceived limitations of other research on and with teachers, in particular to mainstream studies of teachers' knowledge and beliefs. In comparison with the latter fields, identity research moves beyond primarily cognitive interpretations of human functioning towards more holistic perspectives that view knowing, learning, and being as aspects of participation in social and cultural practices or discourses. Identities are seen as cognitive-affective constellations reciprocally related to some form of context, that is, as dependent on time and place, and consequently as multiple and fluctuating, rather than as stable personality traits.

In spite of the consensus that teacher identity "is not a fixed attribute of a person, but a relational phenomenon" (Beijaard et al., 2013, p.206), there is little agreement about the theoretical and methodological implications of this perspective. The construct of identity itself is conceptualised in different ways and a number of different theoretical and methodological approaches are adopted, leading to different empirical emphases

Jeppe Skott

Linnaeus University & University of Agder

(Skott, 2022). Some studies focus on teachers' relation to pre-established social constellations, such as a teacher education (TE) or professional development (PD) programmes (e.g. Bobis et al., 2020; Gresalfi & Cobb, 2011) or public images of what it means to teach in some context (e.g. Darragh & Radovic, 2019; Lanas & Kelchtermans, 2015). Others focus squarely on individuals and their personal biographies (e.g. Clandinin et al., 2006; Lutovac, 2020).

I argue in what follows that there are limitations to both these approaches. Irrespective of whether the main emphasis is on pre-established practices and discourses or on individual biographies, there is often limited attention to the dynamic relations between identities and teachers' contributions to practices that unfold as they engage with their students, their colleagues, the leadership, and others in relation to the profession. In the first case, there is a risk of losing track of individual agency by overemphasising identities on offer by social or societal circumstance. In the second, the emphasis on individuals and their biographies may lead to lack of attention to contextually dependent fluctuations in identity-context relations. It follows that both approaches may be inattentive to how local interactions and teacher identities co-constitute one another. This is a significant omission, if the intentions include understanding how teacher identities relate dynamically to their contributions to practices that unfold in schools and classrooms.

The aims of the present article are to discuss the omission mentioned above and to present an alternative that focuses on identities as they relate to emerging, local practices. It is an empirically informed theoretical essay, rather than a standard empirical piece. To meet the first aim, it reflects on other research in the field. The suggested alternative seeks to remedy the situation outlined above by adopting an interactionist stance. It defines teacher identities as their experiences of being, becoming and belonging as they relate to the profession and combines this definition with the use of a framework called *Patterns of participation* (PoP) that draws on social practice theory and symbolic interactionism. I suggest that this combination allows interpretations of how identities relate to unfolding school and classroom events as well as of longitudinal developments of teacher identities.

The article is "empirically informed" in the sense that it refers to results of empirical studies to illustrate the use of the suggested combination. These studies are qualitative case studies that follow teachers for shorter or longer periods. Inspired by grounded theory (Charmaz, 2014), they use open coding procedures of classroom interactions, collaborative settings, interviews, and documents to understand teachers' learning and lives from the perspective of the teachers themselves. In particular,

they combine careful analyses of school and classroom interactions with stimulated recall interviews to adopt an identity perspective on teachers' contributions to practices that evolve and/or focus on long-term developments in their professional identities. The references to these studies are to substantiate the theoretical argument by illustrating the analytical potentials of the approach. However, a comprehensive presentation of the methodology and data from these studies is beyond the scope of the present article.

The main points of the article, then, are that much identity research does not acknowledge how teacher identities and local practices co-constitute one another and that an interactionist supplement is needed. In order to make these points, section 2 discusses other literature in the field to substantiate the claim that much of it is indeed oblivious to relations between teacher identities and local practices. The following sections elaborate on the interactionist alternative. Section 3 discusses the notion of experience and its relevance to identity research; section 4 elaborates on the PoP framework; and section 5 refers to previous empirical work to illustrate the potentials of the approach. Finally, section 6 sums up the differences between the suggested approach and other ones and argues that the one offered has some potential, if the ambitions of the field include investigating teacher identities as they relate to school and classroom practices and long-term shifts in their identities in relation to local and broader social constellations.

Literature – ambitions of and challenges to identity research

Much of the research on teachers' professional identities is concerned with teachers in transition, that is, with situations in which they are expected to align with new regulations or recommendations for professional practice. In general, the field acknowledges that current reform efforts require more than an addition to teachers' mathematical knowledge, acquaintance with yet another set of prescribed methods, or a change in their "beliefs". A different identity is needed, in one or other understanding of that term. As an early example, Schifter edited two volumes on teacher narratives on teaching after the first set of US Standards (NCTM, 1989, 1991). In the second volume, subtitled "Reconstructing professional identities", Schifter argues that the reform requires teachers to form new identities for instance as mathematical thinkers and monitors of students' learning (Schifter, 1996).

Since then, a host of studies have phrased the professional changes required by the reform in terms of identities. Hodgen and Askew (2007) argue that the reform involves "at least in part becoming a 'different'

teacher and a 'different' person" (p. 474); Gresalfi and Cobb (2011) focus on required shifts in "the forms of instruction with which teachers come to identify" (p. 271); and Bobis et al. (2020) refer to developments in what teachers "recognize as *legitimate ways of being*, in different contexts" (p. 617; emphasis in original). These and many other studies focus on the potentials of innovative TE or PD programmes and on how teachers react to possible conflict between practices promoted by the programmes and traditions at their schools (e.g. Arslan et al., 2021; Buchanan & Olsen, 2018; Conner & Gómez Marchant, 2022). However, they are less concerned with professional identities in the majority of cases in which teachers are not involved in long-term TE or PD. Besides, there is often little attention to the role of broader cultural and political contexts.

Moving beyond TE/PD

A growing number of identity studies acknowledge the need to move beyond the character of TE/PD programmes and of possible conflicts between such programmes on the one hand and traditions at the schools where the participants work on the other. One line of research takes cultural or structural issues into account; another focuses squarely on the individual.

Taking structural issues into account

One line of research broadens the perspective to structural issues such as images of the profession in politically or culturally prominent discourses and teachers' socio-economic status, accreditation procedures, or accountability measures (e.g. Brown & McNamara, 2011; Jong, 2016; Kang & Battey, 2017; Segal, 2022). Darragh and Radovic (2019), for instance, seek to explain why a comprehensive PD programme in Chile did not have long-term effects on institutional practices. Based on interviews, Darragh and Radovic create a vivid image of "what it is to be a Chilean primary mathematics teacher in a lower socio-economic demographic" (p. 525). For the participants, one aspect of that image, the mother-saviour identity, appears incompatible with and overrules the focus on problem solving and productive struggle in the PD programme.

It seems that the ambition in this line of identity research is to develop perspectives on "the complex and mutual relationships between the teachers, the institutions where they work, and the societies where they live" (Losano & Cyrino, 2017, p. 25). However, there are non-trivial theoretical and methodological considerations involved in whether and how discursive identities on offer at a societal level play a role for teachers' shifting senses of themselves as they engage in the profession and for their contributions to the practices that evolve. In other terms, if

identities are located squarely in cultural or political discourses, one may lose track of the individual and overlook how identities relate dynamically to classroom processes. For instance, it is not obvious how to conceptualise relations between cultural identities on offer and classroom interactions, and it is questionable whether it is sufficient to rely on interviews to generate relevant data. Without such considerations, identity research may lose its potential for generating the holistic understandings of teachers and teaching in school contexts that it set out to develop.

Linking personal and professional identities

A second way of shifting the emphasis from TE/PD is to locate identities within the individual, while acknowledging the significance of teachers' social and professional life for identity development. This is so, for instance, in studies of how (personal) commitment to students fuse with, are subsumed by, or overshadow professional obligations that flow from institutional requirements (Day et al., 2006) and of conflict and balance between issues of authority and vulnerability for newcomers to the profession (Alsup, 2018). Often these studies adopt a narrative approach to link "personal" and "professional" identities (e.g. Clandinin et al., 2006; Day, 2013) and/or relate professional identities to research participants' biographies (e.g. Avraamidou, 2019; Kelchtermans, 2013). Lutovac (2020), for instance, linked Finnish prospective teachers' experiences of failure in mathematics with their developing professional identities, their "possible selves". Based on the research participants' response to written assignments from their university coursework, Lutovac argues that experiences of failure influence "the traits pre-service teachers' desire to have or to avoid having", how they think about their relations with the students, and their concerns about their own strengths and weaknesses as teachers-to-be (p. 4).

The tendency in this scholarship is to use semi-structured interviews and reflective journals or other written accounts of teachers' personal and educational lives. This is so, although narrative methodology does invite the use of other methods that result in other field texts (Connelly & Clandinin, 2006). In spite of its potentials, there is a risk in this line of research that resembles the one in studies that focus on identities at the societal or structural level. Relying only on interviews, one may lose track of how identities emerge and function in institutional settings.

Summing up

The above discussion of literature in the field suggests that one main trend is to focus on identities on offer in TE or PD programmes, but leave out questions of identity when teachers are not involved in such

programmes. One supplementary approach is concerned with structural identities beyond the current situation. In this case, however, it is also the a priori expectation that teacher identities are based on pre-established practices and discourses. In both cases, then, the emphasis may shift to social or structural issues and in effect lose track of the individual.

The other supplementary approach to PD/TE studies includes considerations of teachers' personal lives. The assumption seems to be that once established, relatively stable personal-professional identities are important for teacher agency, that is, for their willingness and capacity to act in the profession. However, in some of this research there are limitations to the methodological approach and an inconsistency in relation to the dominant theoretical framework. Like many others, these studies often draw on social practice theory and notions of situatedness when analysing identities. From such a perspective, however, it is problematic to rely merely on interviews and written accounts. Schools and classrooms constitute their own social worlds and the related identities may not resemble those that dominate interviews and reflective writing situations.

To sum up, the discussion of the literature points to two quandaries in the field if it is to develop understandings of how identities relate to group life as it unfolds in schools and classrooms. First, there is a need to re-centre the individual while not losing sight of locally social or structural circumstance; second, the framework and the methodology should allow interpretations of how professional identities relate to emerging, local practices. The point is, then, that more emphasis is needed on school and classroom interactions, if identity research is to develop understandings of how identities relate and contribute to local practices.

The above discussion of the literature suggests that there are few interactionist interpretations of teacher identities in mathematics education. However, others have studied identities in ways that at least implicitly address the quandaries mentioned above. Buchanan and Olsen (2018), for instance, point to the reciprocal relation between learning and identity and seek to understand how "macro-influences (like history and culture), meso-forces (such as education policies and school contexts), and the micro-contexts of daily work in actual schools and classrooms are actually *part of* the ongoing learning process, not simply an influence on it" (p. 197, emphasis in original). Like the approach presented below, they draw on social practice theory and refer to symbolic interactionism. However, it is not clear what the relation is between these sources of inspiration in their work and in particular, what role the interactionist perspective plays. The proposal for identity research made in the present article aligns with the ambition in the quotation from Buchanan & Olsen. In comparison, however, the role of the interactionist stance is explicit in the PoP framework, which is combined with a definition of professional identities as teachers' experiences of being, becoming and belonging.

Experience in educational scholarship

The term experience is used in many ways, even if we disregard fundamental, epistemological controversies and limit the discussion to scholarship in (mathematics) education. One may even argue that there is little to gain by defining identity as experience, as the latter term is as fluffy and ill-defined as the former. In spite of that, I suggest that using a combination of identity as experience and the PoP framework allows one to address the quandaries mentioned previously.

Experience in other studies of identity

References to "experience" are ubiquitous in studies of teacher identity. For instance, "experience" is mentioned in every publication on identity referred to previously in this article. However, there is generally little explicit concern for how the term is used.

One may use the term of experience as merely a short-hand for time spent in the profession (e.g. Podolsky et al., 2019) or on particular aspects of the profession (e.g. preparing or reflecting on instruction) (e.g. König et al., 2015). Another use, often found in studies of identity, is as a reference to cognitive-affective constellations that are reciprocally related to participation in social worlds such as schools, classrooms, and PD-programmes. Teachers may in this sense have or gain experiences of doing a good job (e.g. Gresalfi & Cobb, 2011) or of failure in mathematics (Lutovac, 2020). Gresham (2018) uses the term in both ways when investigating whether five years of *teaching experience* helps a group of novice teachers overcome their *experiences* of mathematics anxiety.

Others have used the term of experience as a key notion in studies of identity. Chavez Rojas et al. (2021), for instance, argue that identity constructions take place as teachers position themselves in "subjective learning experiences", that is, in "discursive reconstruction[s] that [they] conduct based on the learning process that they have undergone through participation in one or more situations" (p. 4). Teachers bring to any such situation an initial identity position, identify and assess the value of "positional objects" in the situation (e.g. people, places, events), and further develop their own discursive position, that is, their identity, in the process.

The most prominent attempt to link experience to identity in educational contexts is by Clandinin, Connelly, and their colleagues (e.g. Clandinin, 2006; Clandinin, 2012; Connelly & Clandinin, 2006). Originally their main interest was in "teachers' personal practical knowledge" (Connelly et al., 1997) as it relates to a reconceptualised understanding of curriculum, "curriculum as a course of life as lives [are] being lived" (Clandinin, 2006, p. 49). Later identity became an explicit object of attention. Clandinin et al. point to how this shift was fuelled by

questions raised by research participants in their previous work: " 'Who am I in my story of teaching?', 'Who am I in my place in the school?', 'Who am I in children's stories?' ". Guided by a narrative approach, Clandinin and her colleagues came to focus on how teachers' personal and professional experiences intertwine and develop into shifting identities, that is, into stories of who they are, "their stories to live by", as they encounter professional challenges (Clandinin et al., 2006, p. 131).

Many of the studies mentioned above align with Segal's more recent wording that "what people do, through language and other activities, is a way of constructing who they are" (2022, p. 3). These studies often build their findings on interviews, written accounts, or informal conversations to investigate reflexive and dynamic relations between prospective or practising teachers' educational and personal experiences and their identity development. The approach adopted in the present paper also emphasises *doing*, linguistically and otherwise. In comparison with many other studies, however, it points to how identities may shift both in the long run and within short periods of time, for instance in a classroom interaction. The argument is that the notion of experience is useful for analysing when and how this is so. It is a methodological corollary that other data materials are needed than teachers' oral or written reflections, especially observations of interactions in classrooms and collaborative settings combined with stimulated recall interviews.

Product and process aspects of identity as experience

There is some agreement that there are both product and process aspects to experience. This is reflected in Jay's distinction between experience as a noun and as a verb (Jay, 2005). Drawing on the difference between *erfahrung* and *erlebnis* in German, he says that the first refers to "something that one can be said to 'have' or 'to have learned from'" and the latter to "the process of experiencing" as it unfolds in the here and now (p. 12).

Somewhat similarly, Dewey talks about interaction and continuity as aspects of experience (Dewey, 1997/1938). Interaction relates to Dewey's non-dualistic, unified perspective on individuals and their social worlds, on what in today's parlance may be described as his view of person-in-practice. Experiences carry simultaneous and inseparable qualities of being intellectual, emotional and social, and they are constituted as transactions between individuals and the context of their actions. As Dewey phrases it himself, "every experience is the result of interaction between a live creature and some aspect of the world in which he lives" (Dewey, 1980/1934, pp. 43–44). The individual acts or "does", but simultaneously

”undergoes” properties of the current situation. The experience ”consists of them [doing and undergoing] in relationship” (p. 44).

It is, still according to Dewey, not all processual or transactional experiences, that is, all *experiencing*, that turn into *experiences had*. If they do not, they are ”inchoate”, that is, “[t]hings are experienced but not in such a way that they are composed into an experience” (1980/1934, p. 35, emphasis in original). To become an experience the transaction requires ”consummation”, turning it into ”a whole [...] with its own individualizing quality and self-sufficiency” (p. 35). *Experiences had* may relate to overwhelming, life-changing events, but may also be more mundane, such as a particular meal or a particular conversation, *that* meal or *that* conversation. For teachers, it could be *that* conflict with the leadership, *that* successful instructional sequence, or *that* fruitful collaborative setting. However, *experiences had* are not fixed mental representations of prior transactions. They are dynamic and relational vis-à-vis current and future *experiencing*. Like other relations or processes, they may be revitalised in and transform new experiential transactions and they may in turn be further developed. As McDermott says, pointing to the dynamic aspect of *experiences had*, Dewey uses ”having” in relation to experiences more as in ”’having’ a friend or ’having’ a good time. It is not used in the sense of ’having’ as possessing” (McDermott, 1981, p. 554).

I suggested earlier that one aim of identity research is to understand the dynamic relations between teachers’ *experiencing* of themselves and their contributions to the practices that evolve within the profession. Developing these understandings, however, requires a holistic perspective that includes the possible significance of *experiences had* from their previous education as well of as from their prior and present professional and personal lives. However, these experiences may be in mutual conflict, and relevant empirical questions include whether and how the significance, meanings, and mutual relations among them change as teachers interact with others in the profession.

Another aim of identity research is to understand how teacher identities develop over time. This involves focusing on how long-term shifts in *experiences had* may result from continuous *experiencing*. For instance, experiencing recognition from the leadership, collaboration with and appreciation from colleagues within and beyond the department, or trusting relationships with the students and the parents (or opposites to any these) may reify or – to use Dewey’s term – reach consummation to become significant *experiences had*.

It is apparent that there are theoretical and methodological implications of defining teacher identities as their experiences of being, becoming and belonging. Pursuing the first of the two aims mentioned above,

one needs a multitude of different methods. This is so for instance in studies of whether and how *experiences had* of being a reform-oriented or innovative teacher and of belonging to a professional community relate dynamically to *experiencing* doing a good job or being recognised as a qualified colleague in a particular setting (cf. introductory section) (e.g. C.K. Skott et al., 2021). If the intention is to follow developments in teacher identity over time, these methods obviously need to be used continually in longitudinal studies (e.g. Skott, 2019). In terms of the theoretical stance, an interactionist approach is needed. In what follows, I outline the PoP framework and argue that it allows interpretations of the dynamic relations between *experiencing* and *experiences had* in both the short and the long run.

Patterns of participation

The Patterns-of-participation framework (PoP) combines social practice theory with symbolic interactionism. It was initially a response to the conceptual and methodological problems of mainstream belief research (Skott, 2015a, 2015b). Challenging the premise that "beliefs" are explanatory principles for practice, PoP-studies adopt a more dynamic and holistic perspective on the individual-context interface and shifts the focus from "beliefs" to the process of relating affectively to institutionalised teaching-learning processes (Skott, 2022). The argument of the present paper is that a similarly dynamic perspective is needed in research on professional identities and that in combination with the definition of identity as experience, PoP is one possible framework to use.

Social practice theory

Social practice theory is concerned with how local practices are negotiated and evolve, whether in the case of tailoring in Liberia (Lave, 1996), insurance companies in the US (Wenger, 1998), or caste systems in Nepal (Holland et al., 1998). It is also concerned with how such practices orient agency and meaning making in open-ended ways, for instance when newcomers move from peripheral to more comprehensive participation in the practice in question and change their identities in the process (Lave & Wenger, 1991).

Social practice theory focuses on the locally social. However, in relation to identity it also attends to the role of practices and social constellations beyond the current situation. Holland et al. (1998) refer to the significance of *figured worlds*, that is, of discursive frameworks or "webs of meaning" in which "particular characters and actors are

recognized, significance is assigned to certain acts, and particular outcomes are valued over others” (Holland et al., 1998, p. 51, 52). Holland et al.’s examples of figured worlds include romance, academia, the factory, and games of Dungeons and Dragons. In mathematics education, the reform, schools, and accountability measures have been considered figured worlds (e.g. Jong, 2016; Ma & Singer-Gabella, 2011). The reform, for instance, certainly constitutes a “web of meaning” that may orient professional identities by prioritising certain actors, acts and outcomes.

Wenger (1998) also refers to the role of social worlds beyond the immediate setting for one’s identity. He distances himself from the idea of multiple identities and views identity as a “nexus of multi-membership” of different communities of practice: “We define who we are by the ways we reconcile our various forms of membership into one identity” (p. 149).

In spite of the recognition that other social constellations may play a role for identities, there is limited attention to when, how, and why engagement in them contributes to participation in immediate social settings. For teachers this may be how one draws on a general educational discourse from a TE programme in a conflictual classroom situation, possibly *experiencing* oneself as more of an educationist than a mathematician. It may be how an emotional confrontation at a PTA meeting, a problematic *experience had*, is reinvigorated in a later interaction with the students, challenging the teacher’s *experiencing* of professional competence. It may be how gaining a position among a newly formed team of colleagues leads to shifts in *experiencing* one’s professional status and sense of belonging at the school. PoP draws on symbolic interactionism to address such questions and thereby point to how a multiplicity of possibly competing identities may be significant for teachers’ contributions to the interactions that unfold.

Symbolic interactionism – an approach to “experiencing”

Like social practice theory, symbolic interactionism (SI) is interested in how life unfolds locally. It “attends to the ongoing accomplishment of everyday life in the ‘here and now’ ” (Prus, 1996, p. xviii). In comparison with social practice theory, however, SI provides a supplementary and more detailed perspective on how group life evolves and why. As part of that, it may suggest how practices and figured worlds beyond the immediate situation may play a part for evolving identities.

In SI, interaction is not merely a term for interlocutors exchanging views on some object or issue. It is the process through which the objects attended to and their meanings are formed and created, be they physical objects, particular people, or abstract concepts. Skott (2013), for instance,

exemplifies how the object of attention shifts for a teacher, Anna, when she works with a pair of students. Anna has set a task to facilitate the students' learning of and from mathematical communication as they work on fractions. The students find it difficult and one of them, Debra, is explicitly insecure in terms of mathematics. Anna responds by encouraging and praising Debra, accepting her poor solution to the task. In the process, the object of her attention shifts from facilitating the two students' learning to ensuring that she does not challenge Debra's self-confidence and jeopardize her own relationship with her. As a consequence, the meaning of a joint meta-object, that of mathematical activity, changes from investigating rational numbers to conducting a highly specialized procedure for reducing particular fractions.

It is, however, not only other objects that are constituted in interaction; so are the interlocutors themselves. As McCall (2003) points out, interaction is "centrally a matter of negotiating identities and roles: 'Who are we, and what are we doing?' " (p. 329). In interaction, he says, people communicate how they see themselves and others. In his terminology, a person acting is involved in *presentation of self* as well as in *altercasting*, that is, in communicating to another how "he or she is categorized by actor" (p. 330). In the above episode, both Anna and the students are involved in these processes. Debra presents herself as sensitive and personally challenged and calls for Anna's sympathy and emotional support. Anna accepts the invitation and *experiencing* herself as more of a caregiver and a friend than a facilitator of mathematical learning, she counters Debra's presentation of herself as mathematically incompetent and altercasts her as relatively more proficient by accepting her solution in spite of its shortcomings.

Such shifts in professional *experiencing* relates to the notion of self. SI takes a processual view of self and suggests that when people act in relation to others, they see themselves from their interlocutors' perspectives, envisage possible reactions, and modify their own act in the process. This means that there are two aspects or phases to self, an I and a me. The I acts – does, says, thinks – but instantaneously sees itself from the point of view of others and becomes a me, an object of acting person's own attention. As a result, the initial act as performed by the I may be adjusted.

In this terminology, Anna's response in the episode above is partly an outcome of taking Debra's attitude to herself and of acknowledging and accommodating Debra's verbal and gestural appeal for recognition and support. However, Anna also sees herself from the perspective of generalized others in the form of two figured worlds, those of *the reform* and of *relationing*. Anna's orientation towards the reform is based on her pre-service education and is apparent for instance in her attempts to make

the students communicate in order to develop ways of solving mathematical problems. *Relationing* summarises a more general educational figured world, one in which teachers are recognized if they take personal responsibility for the students' well-being, in which establishing personal relations with students is deemed significant, and in which students' self-confidence are among the valued outcomes (cf. the quotation from Holland et al. on figured worlds, in the Social practice theory section).

In this interpretation, Anna's *experiencing* of being qualified for the job and of belonging professionally depends on how she positions herself in relation to different figured worlds, in this case the reform and relationing. Referring to the above quotation from McCall, this is matter of "who we are" in the interaction, that is, of experiencing communities to relate and belong to. In an immediate sense, "we" refers to Anna and her students. In relation to professional identities, however, the "we" in question is more or at least also a matter of significant figured worlds. In this episode, Anna shifts from primarily taking the attitude to herself of the reform to foregrounding a perspective based on relationing. Her *experiencing* being good at her job, becoming better at it and belonging in the profession depends on the "we" to which she refers at the instant. In this case, she aligns with a general pedagogical discourse, rather than one specific to the discipline of mathematics.

Potentials of the PoP framework

As indicated in the literature section, other research on teacher identities tend to foreground either pre-established practices and figured worlds or individual biographies. PoP is to overcome possible limitations of both.

In contrast to the first of these approaches, PoP-studies re-centre the individual (Skott, 2018). They do not focus on how teachers move – or do not move – from peripheral to more comprehensive participation in one particular practice or figured world, for instance as promoted by TE or PD programmes or by a broader cultural discourse. Rather, they address questions, for instance, of what and how identities are combined, challenged, and negotiated as teachers draw on a multitude of prior and present social constellations when interacting with their students, their colleagues and others related to the profession.

In comparison with the second approach, which does focus on the individual, PoP-studies emphasise the fluctuating and dynamic character of identities. They do not assume that teacher agency is based on relatively stable identities that are inferred by analysis of teachers' linguistic accounts of themselves in the profession. Rather, they seek to identify

the character and shifting significance of different identities as teachers engage in the multiple tasks of teaching.

In comparison with both approaches, the combination of PoP and the definition of identity as experience allows understandings of teachers' "emerging individualities in the locally social" (Skott, 2022, p.18). Further, it allows one to address questions of whether and how these fluctuating identities inform teachers' contributions to emerging local practices and of how they may change over time. To illustrate the point, the next section refers to two previous studies with special emphasis on the relations between *experiencing* and *experiences had*.

From *experiencing* to *experiences had*

As mentioned already, certain *experiencing* may stand out and turn into *experiences had*. However, consummation of *experiencing* is not only related to singular experiential incidents or episodes. Repeated or continuous *experiencing* across professional situations, for instance as they relate to one's professional tasks, obligations, and relations, may gradually accumulate and reify into new *experiences had*. In turn, this may result in contextually dependent, but recurrent and possibly somewhat more unified identities. For instance, *experiencing* may turn into *experiences had* of being or becoming a particular kind of person in some community or of belonging to the community in particular ways. This may be so irrespective of whether the community in question is local (e.g. a group of collaborating teachers) or constituted by some more distant figured world (e.g. the reform). One may, as Skott (2013) points out, in this sense develop overlapping identities of being a good colleague, a poor mathematician, an innovative teacher and a close ally of the students, as well as designations from private contexts that may also influence one's professional life in schools and classrooms.

I refer to two studies to illustrate the point above. The first was not initially phrased in terms of identities, but invites interpretations in those terms (Skott, 2009). It concerns a Danish novice teacher, Larry, who developed a multi-dimensional sense of professional isolation after he graduated from a reform-oriented teacher education programme and took up teaching at a conservative private school. Although some incidents stood out, there did not seem to be any one episode that in particular fuelled Larry's emerging sense of an I-they relationship to his colleagues and the leadership and a fading sense of belonging to the communities from his preservice education. He was almost continuously *experiencing* aloof disengagement from his colleagues and disregard and rejection of his appeal for support and collegial collaboration. Besides, neither his colleagues

nor the leadership or others at the school shared his fascination with his reformist preservice education. Consequently, he gradually developed a sense of being the odd one out, an *experience had* that led him to withdraw from the social context of the school, first emotionally and socially and later physically as he left the school altogether.

The second example is the study of Anna mentioned above (Skott, 2013, 2019). The study spans four years, beginning at the time of Anna's graduation. The episode referred to previously (see the section on Symbolic interactionism – an approach to "experiencing") is from the autumn term of her second year of teaching at her school, Northgate. Already when she leaves college, Anna speaks and acts in her new profession with confidence. She distances herself from colleagues in the department and describes them as traditionalists. In contrast, she says, she is a *mathematics* teacher committed to the reform, who also has close personal relations with the students. Over time, however, new practices and figured worlds emerge and the character of and relations among the initially prominent ones change. One example is how she gradually positions herself more prominently in relation to what her colleagues refer to as "the Northgate spirit". In Anna's case, however, there are also a number of specific incidents that are important and turn into new *experiences had*. These include when the deputy head calls her to his office to ask for her advice on administrative and educational issues; when the head of the mathematics department invites her to present her use of digital resources to her colleagues at a local development initiative; and when the leadership asks her to represent the school at a meeting with the ministry of education. *Experiencing* that she is professionally recognized and increasingly valued by her team, by the department and by the leadership, reify into significant *experiences had* of belonging at Northgate. Constructing who she is and is becoming "through language and other activities" (cf. the reference to Segal, in the section on *Experience* in other studies of identity), Anna's dominant *experiences had* change from being a "mathematics teacher at Northgate" to becoming a "mathematics teacher at *Northgate*" (Skott, 2019, p. 478).

Discussion and conclusion

As pointed out earlier, there is little agreement about the more specific implications of the social stance in identity research, including the use of the term of identity itself. In spite of that, the literature review shows that significant new understandings have been developed in the field. Some studies focus on social and cultural practices or discourses and investigate how they orient teachers' sense of themselves in the

profession. Others use research interviews to understand how biographies and teachers' personal lives relate to their professional identities.

In spite of their potentials, however, both lines of research may overlook what and how identities emerge in the locally social and contribute to current institutional practices. The premise of the present paper is that supplementary approaches are needed that limit the risk of doing so and allow for interpretations of how locally-social individualities emerge in context. The suggestion offered is an approach that combines a definition of identities as teachers' professional experiences of being, becoming and belonging with the PoP framework. The argument is that the interactionist stance in this combination re-centres the individual while maintaining the general participatory stance of identity research.

The approach in the experience-PoP combination shares important characteristics with other research in the field. One set of approaches is premised on the assumption that pre-established practices, discourses, or figured worlds constitute possible professional identities on offer for teachers' to adopt or attach themselves to in particular situations (e.g. Darragh & Radovic, 2019). In some sense, this resembles the perspective of the present paper as it assumes that *experiences had* from participating in other practices and figured worlds may play prominently in current *experiencing*. However, the interactionist stance re-centres the individual by focusing on what and how particular prior experiences come to play a role for instance in a classroom interaction or a collaborative setting. In other terms, the emphasis shifts from the pre-established practices and discourses themselves to analyses of their variable significance for the individual within and across interactions in local settings.

The approach presented in this paper also resembles studies that link personal and professional identities. It is from the perspective of the experience-PoP combination certainly an option that teachers' individualities in school contexts draw on personal *experiences had*. However, if data generating methods rely merely on interviews or written self-reports, there may be little indication of what role shifting identities play in practice, if any. Kelchtermans (2013) points out in relation to the narrative approach that "one's self-understanding only appears in the act of 'telling' [...] the intersubjective nature of the self-understanding is immediately included in the concept itself, since the telling that reveals the self-understanding always presupposes an audience of 'listeners' " (p. 386). However, both "the act of 'telling' " and the "audience of 'listeners' " differ in school and classroom situations from those in interview or self-report sessions. To be specific, teaching a group of unruly 7-graders means engaging in an entirely different set of practices from when participating in for instance a semi-structured research interview.

Consequently, the professional identities in the two situations may differ as well.

The moral of the story is that identity research set out to develop holistic understandings of teachers and teaching. Much productive research has been done on that. Notwithstanding the potentials of other approaches, I suggest that an interactionist supplement is needed to understand how teachers' professional identities relate reciprocally to school and classroom practices both in the short and in the long run. The combination of a definition of identities as experiences and the PoP framework is one possible option.

References

- Alsop, J. (2018). Teacher identity discourse as identity growth: Stories of authority and vulnerability. In P. A. Schutz, J. Hong & D. C. Francis (Eds.), *Research on teacher identity. Mapping challenges and innovations* (pp. 13–24). Springer. <https://doi.org/10.1007/978-3-319-93836-3>
- Arslan, O., Haser, Ç. & Van Zoest, L. R. (2021). The mathematics teacher identity of two early career mathematics teachers and the influence of their working communities on its development. *Journal of Mathematics Teacher Education*. <https://doi.org/10.1007/s10857-021-09498-0>
- Avraamidou, L. (2019). Stories we live, identities we build: How are elementary teachers' science identities shaped by their lived experiences? *Cultural Studies of Science Education*, 14(1), 33–59. <https://doi.org/10.1007/s11422-017-9855-8>
- Beijaard, D., Meijer, P. C. & Verloop, N. (2013). The emergence of research on teachers' professional identity: a review of literature from 1988 to 2000. In C. J. Craig, P. C. Meijer & J. Broeckmans (Eds.), *From teacher thinking to teachers and teaching: the evolution of a research community* (pp. 205–222). Emerald. [https://doi.org/10.1108/S1479-3687\(2013\)0000019013](https://doi.org/10.1108/S1479-3687(2013)0000019013)
- Bobis, J., Khosronejad, M., Way, J. & Anderson, J. (2020). "Sage on the stage" or "meddler in the middle": shifting mathematics teachers' identities to support student engagement. *Journal of Mathematics Teacher Education*, 23(6), 615–632. <https://doi.org/10.1007/s10857-019-09444-1>
- Brown, T. & McNamara, O. (2011). *Becoming a mathematics teacher. Identity and identifications*. Springer.
- Buchanan, R. & Olsen, B. (2018). Teacher identity in the current teacher education landscape. In P. A. Schutz, J. Hong & D. C. Francis (Eds.), *Research on teacher identity* (pp. 195–205). Springer. https://doi.org/10.1007/978-3-319-93836-3_17
- Charmaz, K. (2014). *Constructing grounded theory* (2nd ed.). Sage.

- Chavez Rojas, J., Faure Ñiños, J. & Barril Madrid, J. P. (2021). The construction of teachers' professional identity: an analysis of subjective learning experiences. *European Journal of Teacher Education*, 1–18. <https://doi.org/10.1080/02619768.2021.1905627>
- Clandinin, D. J. (2006). Narrative inquiry: a methodology for studying lived experience. *Research studies in music education*, 27 (1), 44–54. <https://doi.org/10.1177/1321103X060270010301>
- Clandinin, D. J., Huber, J., Huber, M., Murphy, M. S., Orr, A. M. et al. (2006). *Composing diverse identities: narrative inquiries into the interwoven lives of children and teachers*. Routledge. <https://doi.org/10.4324/9780203012468>
- Clandinin, J. D. (2012). Afterword: reflections on narrative inquiries into teacher education identity making. In E. Chan, D. Keyes & V. Ross (Eds.), *Narrative inquirers in the midst of meaning-making: interpretive acts of teacher educators* (pp. 143–148). Emerald Group. [https://doi.org/10.1108/S1479-3687\(2012\)00000160011](https://doi.org/10.1108/S1479-3687(2012)00000160011)
- Connelly, F. M., Clandinin, D. J. & Ming Fang, H. (1997). Teachers' personal practical knowledge on the professional knowledge landscape. *Teaching and Teacher Education*, 13 (7), 665–674. [https://doi.org/10.1016/S0742-051X\(97\)00014-0](https://doi.org/10.1016/S0742-051X(97)00014-0)
- Connelly, F. M. & Clandinin, J. D. (2006). Narrative inquiry. In J. L. Green, G. Camilli & P. Elmore (Eds.), *Handbook of complementary methods in education research* (3rd ed., pp. 477–487). Lawrence Erlbaum.
- Darragh, L. & Radovic, D. (2019). "To Tia with love": Chilean mathematics teacher identities after professional development. *ZDM*, 51 (3), 517–527. <https://doi.org/10.1007/s11858-018-01023-7>
- Day, C. (2013). The new lives of teachers. In C. J. Craig, P. C. Meijer & J. Broeckmans (Eds.), *From teacher thinking to teachers and teaching* (pp. 357–377). Emerald. [https://doi.org/10.1108/S1479-3687\(2013\)0000019020](https://doi.org/10.1108/S1479-3687(2013)0000019020)
- Day, C., Kington, A., Stobart, G. & Sammons, P. (2006). The personal and professional selves of teachers: stable and unstable identities. *British Educational Research Journal*, 32 (4), 601–616. <https://doi.org/10.1080/01411920600775316>
- Dewey, J. (1980/1934). *Art as experience*. Perigee.
- Dewey, J. (1997/1938). *Experience and education*. Touchstone.
- Gresalfi, M. S. & Cobb, P. (2011). Negotiating identities for mathematics teaching in the context of professional development. *Journal for Research in Mathematics Education*, 42 (3), 270–304. <https://doi.org/10.5951/jresmetheduc.42.3.0270>
- Gresham, G. (2018). Preservice to inservice: Does mathematics anxiety change with teaching experience? *Journal of Teacher Education*, 69(1), 90–107. <https://doi.org/10.1177/0022487117702580>

- Hodgen, J. & Askew, M. (2007). Emotion, identity and teacher learning: becoming a primary mathematics teacher. *Oxford Review of Education*, 33 (4), 369–487. <https://doi.org/10.1080/03054980701451090>.
- Holland, D., Skinner, D., Lachicotte Jr, W. & Cain, C. (1998). *Identity and agency in cultural worlds*. Harvard University Press.
- Jay, M. (2005). *Songs of experience: modern American and European variations on a universal theme*. University of California Press.
- Jong, C. (2016). Linking reform-oriented experiences to teacher identity: the case of an elementary mathematics teacher. *The Journal of Educational Research*, 109 (3), 296–310. <https://doi.org/10.1080/00220671.2014.947398>
- Kang, H. J. & Battey, D. (2017). Contextualizing the identity development of preservice elementary mathematics teachers in methods courses and mentor teacher support. *Journal of Education and Development*, 1 (1), 24–36. <https://doi.org/10.20849/jed.v1i1.248>
- Kelchtermans, G. (2013). Who I am in how I teach is the message: self-understanding, vulnerability, and reflection. In C. J. Craig, P. C. Meijer & J. Broeckmans (Eds.), *From teacher thinking to teachers and teaching: the evolution of a research community* (pp. 379–401). Emerald. [https://doi.org/10.1108/S1479-3687\(2013\)0000019021](https://doi.org/10.1108/S1479-3687(2013)0000019021)
- König, J., Blömeke, S. & Kaiser, G. (2015). Early career mathematics teachers' general pedagogical knowledge and skills: Do teacher education, teaching experience, and working conditions make a difference? *International Journal of Science and Mathematics Education*, 13 (2), 331–350. <https://doi.org/10.1007/s10763-015-9618-5>
- Lanas, M. & Kelchtermans, G. (2015). "This has more to do with who I am than with my skills" – student teacher subjectification in Finnish teacher education. *Teaching and Teacher Education*, 47, 22–29. <https://doi.org/10.1016/j.tate.2014.12.002>
- Lave, J. (1996). Teaching, as learning, in practice. *Mind, Culture, and Activity*, 3 (3), 149–164. https://doi.org/10.1207/s15327884mca0303_2
- Lave, J. & Wenger, E. (1991). *Situated learning. Legitimate peripheral participation*. Cambridge University Press.
- Losano, L. & Cyrino, M. C. d. C. T. (2017). Current research on prospective secondary mathematics teachers' professional identity. In M. E. Strutchens, R. Huang, L. Losano, D. Potari, J. P. da Ponte et al. (Eds.), *The mathematics education of prospective secondary teachers around the world* (pp. 25–32). Springer.
- Lutovac, S. (2020). How failure shapes teacher identities: pre-service elementary school and mathematics teachers' narrated possible selves. *Teaching and Teacher Education*, 94, 103120. <https://doi.org/10.1016/j.tate.2020.103120>

- Ma, J. Y. & Singer-Gabella, M. (2011). Learning to teach in the figured world of reform mathematics: negotiating new models of identity. *Journal of Teacher Education*, 62(1), 8–22. <https://doi.org/10.1177/0022487110378851>
- McCall, G. J. (2003). Interaction. In L. T. Reynolds & N. J. Herman-Kinney (Eds.), *Handbook of symbolic interactionism* (pp. 327–348). AltaMira.
- McDermott, J. J. (1981). *The philosophy of John Dewey: volume 1. The structure of experience. Volume 2: The Lived Experience*. University of Chicago Press.
- NCTM. (1989). *Curriculum and evaluation standards for school mathematics*. NCTM.
- NCTM. (1991). *Professional standards for teaching mathematics*. NCTM.
- Podolsky, A., Kini, T. & Darling-Hammond, L. (2019). Does teaching experience increase teacher effectiveness? A review of US research. *Journal of Professional Capital and Community*, 4(4), 286–308. <https://doi.org/10.1108/JPCCC-12-2018-0032>
- Prus, R. (1996). *Symbolic interaction and ethnographic research*. State University of New York.
- Schifter, D. (Ed.). (1996). *What's happening in math class? Reconstructing professional identities* (vol. 2). Teachers' College Press.
- Segal, A. (2022). When the student is the "problem" and the teacher is not the solution: teacher professional identity in an era of accountability and personalized instruction. *Learning, Culture and Social Interaction*, 32, 100597. <https://doi.org/https://doi.org/10.1016/j.lcsi.2021.100597>
- Skott, C. K., Psycharis, G. & Skott, J. (2021). Aligning teaching with current experiences of being, becoming and belonging: an identity perspective on the use of digital resources. In A. Clark-Wilson, A. Donevska-Todorova, E. Faggiano, J. Trgalová & H. G. Weigand (Eds.). *Mathematics education in the digital age* (pp. 213–227). Routledge.
- Skott, J. (2009). Contextualising the notion of belief enactment. *Journal of Mathematics Teacher Education*, 12(1), 27–46. <https://doi.org/10.1007/s10857-008-9093-9>
- Skott, J. (2013). Understanding the role of the teacher in emerging classroom practices: searching for patterns of participation. *ZDM*, 45(4), 547–559. <https://doi.org/10.1007/s11858-013-0500-z>
- Skott, J. (2015a). Beliefs and brownies: in search of a new identity for "belief" research. In L. Sumpter (Ed.), *Current state of research on mathematical beliefs XX. Proceedings of the MAVI-20 conference* (pp. 33–45). Höskolan Dalarna.
- Skott, J. (2015b). Towards a participatory approach to "beliefs" in mathematics education. In B. Pepin & B. Rösken (Eds.), *From beliefs to dynamic affect systems in mathematics education. Exploring a mosaic of relationships and interactions* (pp. 3–23). Springer.

- Skott, J. (2018). Re-centring the individual in participatory accounts of professional identity. In G. Kaiser, H. Forgasz, M. Graven, A. Kuzniak, E. Simmt & B. Xu (Eds.), *Invited lectures from the 13th International Congress on Mathematical Education* (pp. 601–618). Springer.
<https://doi.org/10.1007/978-3-319-72170-5>
- Skott, J. (2019). Changing experiences of being, becoming, and belonging: teachers' professional identity revisited. *ZDM*, 51(3), 469–480.
<https://doi.org/10.1007/s11858-018-1008-3>
- Skott, J. (2022). Conceptualizing individual-context relationships in teaching: developments in research on teachers' knowledge, beliefs and identity. In J. Hodgen, E. Geraniou, G. Bolondi & F. Ferretti (Eds.), *Twelfth congress of the European Society for Research in Mathematics Education (CERME12)* (pp. 34–60). ERME/Free University of Bozen-Bolzano.
- Wenger, E. (1998). *Communities of practice. Learning, meaning, and identity*. Cambridge University Press.

Jeppe Skott

Jeppe Skott is a professor of mathematics education at Linnaeus University, Sweden, and a professor II at the University of Agder, Norway. His research focuses on teacher development, for instance as it relates to professional identity and other affective issues and to mathematical practices such as mathematical reasoning. There is an emphasis in his research on theorising the role of the teacher for emerging classroom processes.

jeppe.skott@uia.no

