Mindsets and reflection in teacher education for inclusive language classrooms

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Der Beitrag diskutiert, inwiefern das Konstrukt von *Mindset* dabei helfen kann, die Professionalisierungsprozesse von Englischlehrkräften und die Entwicklung ihrer Reflexionskompetenz hinsichtlich inklusiver, heterogener Settings innerhalb einer evidenzbasierten Fortbildung zu unterstützen.

Ausgehend von den Beitrag rahmenden Fallbeispielen, die potenzielle Entwicklungsprozesse von angehenden Englischlehrkräften aufzeigen, werden die Hintergründe von *Mindset* erläutert, wie dieses Konstrukt aktuell für Fremdsprachenlernen und -lehren diskutiert und empirisch fundiert wird und in welchem theoretischen Verhältnis es zu den Konstrukten Reflexion und Reflexionskompetenz steht. Es wird die Arbeitshypothese aufgestellt, dass eine stärkere Reflexionskompetenz förderlich sein könnte zur Entwicklung von dynamischen *Mindsets*, die die Fähigkeiten von Lernenden im inklusiven Fremdsprachenunterricht unterstützen. Im Anschluss daran wird der Entwicklungsprozess einer Fortbildung für Englischlehrkräfte vorgestellt, welche vor dem Hintergrund und unter Berücksichtigung von *Mindset* und Reflexionskompetenz gestaltet und anhand entsprechender Instrumente beforscht wird. Die Ergebnisse werden eingebettet in den Diskurs um Möglichkeiten, wie den Bedarfen aller Schülerinnen und Schüler im heterogenitätssensiblen Englischunterricht durch dieses Fortbildungskonzept begegnet werden können.

1. Instead of an introduction: Two case studies

Jana and Marie (names changed for anonymization) both plan to become English teachers and have enrolled in a university program that will lead to this qualification. They both have comparatively strong English as a Foreign Language (EFL) skills, as attested by their own secondary school grades and their standardized exam scores, a prerequisite for their chosen course of study. Despite these superficial similarities, the two pre-service teachers have very different concepts about the nature of language learning and language learners:

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Jana believes that learning languages comes easily to learners with strong verbal abilities, and that this may differ substantially from their achievement in other school subjects. She tends to think that some people have a special ability to learn languages, and that regular exposure to a language at an early age is adequate in order for those who, like her, have an aptitude for it, to learn it relatively well. At the same time, she thinks learning English is comparatively difficult. Jana knows people who have worked hard to try to learn a language, but have been unsuccessful, reinforcing her belief that some people do not possess the kind of intelligence or do not have the innate ability needed to learn a foreign language. Those learners, Jana thinks, are going to feel alienated in classes with more capable learners who struggle less, with negative consequences for their self-efficacy, motivation, and ultimate school-related language attainment. She questions whether courses or materials differentiated by ability might better meet the needs of all kinds of learners.

Marie considers herself a hard worker and a dedicated learner, and that this accounts for her success in learning English when she was in school. While she thinks that it is easier for someone who already knows one foreign language to learn another one, she thinks that learners can focus on vocabulary and grammar acquisition and attain high levels of foreign language competence in this way. This is especially true, in her opinion, for more mature learners who can take better advantage of metacognitive skills. Based on her own experiences, Marie doesn't believe that there is anything special about learning a foreign language; as in other subjects, hard work and repeated practice will lead to success for most learners. She agrees with Jana that learning English is difficult, but that, with adequate effort, most learners can achieve good results. Marie thinks it is important to differentiate materials, provide visualizations, or use scaffolding so that students of various abilities can experience feelings of efficacy in a heterogeneous English classroom.

Jana and Marie represent two ends of a spectrum among pre-service EFL teachers. While Jana is more likely to assume that language learners possess a relatively fixed language learning ability, Marie believes that even previously weak learners can become successful language learners. This starting point seems to shape the two future teachers' attitudes towards inclusive and heterogeneous EFL settings: whereas Jana tends to think that students who are weak learners or who have special needs might be better served in settings geared specifically towards them, Marie is more optimistic about the ability of effective EFL teachers to meet all learners' needs in mixed ability groups. While this relationship between their implicit beliefs about language learning and their attitudes towards inclusive EFL classes is not necessarily representative of their cohort as a whole, the fact that Jana is unable to identify ways to meet the needs of all learners in her class whereas Marie names specific - albeit limited - steps she can take to include everyone, is typical. In fact, a mixed-methods study (Blume, Gerlach, Roters & Schmidt 2019a) carried out among pre-service EFL teachers in their third semester of a teacher education program revealed a significant correlation between the participants' attitudes towards inclusion and reflective competence by the end of a dedicated seminar on the subject of inclusion and heterogeneity in EFL. Given, however, the small scale of this study and the demographics of the population

involved, the exact relationship among these three constructs – beliefs about language learning, attitudes toward heterogeneity, and reflective competence – remains unclear. Especially in light of emerging evidence regarding the role of EFL teachers' beliefs, increasing heterogeneity in EFL classes, and a growing focus on language teacher education that inculcates reflective competence, a better understanding of how these aspects of teacher knowledge relate to one another, and develop as a result of targeted instruction in different phases of teacher professionalization, is critically necessary.

Although simplistic descriptions of mindsets describe them in oppositional terms as either "fixed" (the belief that a person's ability to learn is relatively immutable) or "dynamic" (the belief that a person's ability to learn is changeable, depending on the environment), in practice, mindsets are multidimensional constructs that exist on a spectrum. In terms of foreign language learning, empirical models demonstrate that these mindsets incorporate various dimensions, reflecting, for example, implicit theories about general intelligence, language learning aptitude, and critical periods of language learning (Lou & Noels 2019). Adding to this complexity, mindsets may vary according to the language domain, such as speaking, and most likely, according to subdomains, such as monological or dialogical speaking, as well (Mercer & Ryan 2010). Mindsets, like all beliefs, are both simultaneously relatively stable and hence resistant to change, and are co-constructed in particular cultural and situational settings that may lead to change over time (Bernecker & Job 2019).

This complexity in their nature and the difficulty in measuring and shaping them perhaps accounts for the fact that, while language learning beliefs of foreign language teachers in general have been thoroughly theorized and examined (cf. Caspari 2014), the facet of beliefs known as mindsets has been largely neglected. However, in light of the fact that substantial research from other domains indicates that the mindsets of teachers can have a significant impact on learners' own mindsets and, ultimately, those students' self-efficacy beliefs, learning behaviors, and educational outcomes (Bernecker & Job 2019), it is critical that attention is paid to the nature and development of (pre-service) teachers' mindsets in learning opportunities, especially in particular types of settings. Given research indicating that teachers' mindsets are influenced by learner characteristics such as performance and disability, for example, examining mindsets requires a focus on both specific types of teacher professionalization that may affect these mindsets, and on specific learner populations that teachers with varying mindsets may encounter.

Understanding how mindsets interact with or shape attitudes towards inclusion, and ultimately, instructional practices in inclusive classrooms, is critical to developing teacher professionalization programs that address these relationships and, potentially, influence them in propitious ways over time. Studies that do not focus on specific subjects have identified correlations between mindsets and attitudes towards the inclusion of learners with special educational needs, thus suggesting the importance of taking into account teachers' mindsets when addressing inclusion (Jordan, Schwartz & McGhie-Richmond 2009; Gutshall 2013; Kopmann & Zeinz 2016). Of particular interest is the role reflection may play in this process, given that both mindsets and attitudes towards inclusion have been shown to surface in reflective processes, and may furthermore be positively developed through them (Anderson, Boaler & Dieckmann 2018; Baust & Pachner 2020).

Jana and Marie were participants in an undergraduate seminar designed to prepare pre-service EFL teachers for future teaching in heterogeneous and inclusive classroom environments. Developed in a "theory-practice"-network as part of the Initiative for Excellence in Teacher Education (*Qualitätsoffensive Lehrerbildung*) at Leuphana University Lüneburg, the course's goal was to provide the foundational knowledge and foment the attitudes required for teachers to be able to address the affective and academic needs of all EFL learners (Blume, Gerlach, Roters & Schmidt 2019a, 2019b). Delivered in a blended-learning format, the seminar relied on methodological principles that have been recognized for their role in initial teacher learning, including substantial opportunities for reflection, sheltered forays into teaching, and interwoven connections between theoretical concepts and practice-related instances, using a combination of case studies, classroom products, video vignettes, and expert input.

The concomitant research focused on three aspects of the pre-service teachers' implicit knowledge and orientations, namely, their attitudes towards inclusive teaching and learning, their beliefs about language learning, and their reflective competence (Blume et al. 2019a). While the analysis of the data revealed no significant change in the participants' neutral attitudes towards inclusive education, both their beliefs and their reflections developed in ways that are hypothesized to be conducive to inclusive instruction. In both of these areas, the data reveal that the students became truly more "inclusive," by subscribing more readily to beliefs and describing more frequently or thoroughly teaching approaches that suggest an expansion of learning opportunities for learners with special educational needs or other educational hindrances. While the cohort's attitudes towards inclusion did not change, their assumption of what learners could or could not learn did. In other words, their mindsets became more inclusive. They did so by recognizing the ability of even labelled or disadvantaged learners to successfully learn EFL, and they voiced concepts in their reflections that showed how they could, as teachers, make this happen.

While this learning opportunity thus successfully addressed at least some aspects of the implicit knowledge and reflective stance necessary to prepare EFL teachers for inclusive teaching, its status as an undergraduate seminar restricted the use of many pedagogical methods seen as necessary for effective teacher professionalization. Despite including such elements as opportunities for dialogue within a professional community of practice, for example, it was not possible to fully incorporate the integration and reflection of actual instruction. These limitations highlight the need for further professionalization opportunities in this domain for practitioners. Relying on the empirical data gleaned from the introductory seminar, and reworked with content and methods adapted to reflect principles of effective teacher professional development in the so-called third phase of teacher education, a professional learning opportunity for practicing EFL teachers was designed to deepen their understanding and strengthen their ability to design and enact inclusive language classrooms. Created through a partnership between the Qualitäts- und UnterstützungsAgentur – Landesinstitut für Schule Nordrhein-Westfalen (QUA-LiS NRW) and Leuphana University Lüneburg, the course QualiTIES (Qualifying Teachers for Innovative English Settings) is designed to reflect both the lessons learned from the undergraduate seminar and principles of effective further teacher professional development for inclusive educational settings. The course, which is described in detail in 3.2, is also the focus of accompanying research that is sketched in 3.3. In this way, the learning opportunity both relies on data and contributes to the data on teacher preparation and professionalization on a particular subject, and addressing a specific need. It thus reflects the principles of design-based research (cf. Prediger, Schnell & Rösike 2016) and recommendations regarding professional development of practitioners (Lipowsky & Rzejak 2019). With the research focus on mindsets, it contributes to the understanding of an implicit construct given increasing attention for its implications in heterogeneous settings. At the same time, the parallel focus on reflective practice likewise generates a better understanding of the ways in which reflection as a further implicit construct relates to these mindsets.

This contribution will elucidate how mindsets are a relevant aspect of reflective language teacher education for heterogeneous and inclusive EFL settings in light of prior research before describing the professional development course that scaffolds teacher reflection in ways designed to address precisely these mindsets. Finally, the methodological approach to analyzing the ways in which participants' mindsets and reflective capacities develop as a result of this learning opportunity will be described in anticipation of data that will be analyzed upon its conclusion.

2. Mindsets, reflection, and professional development for inclusive language classrooms

Research on teacher professionalism and professional development can be divided into three approaches, reflecting competence-based, structural, and biographical approaches (Terhart 2011). Although these approaches are often presented as contradictory, there are clear overlaps that can be exploited to promote teacher professionalism, and to research it (Gerlach, Roters & Steininger 2020). The question remains as to what extent the construct of mindsets can be incorporated into the various domains of teacher knowledge and reflective competence. Based on the assumption that it is primarily incorporated, implicit (tacit) knowledge that guides the actions of professionals (e.g. Neuweg 2019) and experts (Bromme & Haag 2008) and therefore might function as a prerequisite for the application of explicit knowledge (Bonnet & Hericks 2019), mindsets - if they are structured in a similar way to more general beliefs and implicit orientations are more difficult to promote and change concretely through interventions (than i.e. explicit knowledge or competence transfer). It is therefore necessary to describe potential connections between the constructs mindset and reflective competence, how they interact, and how this interaction can be made useful for the professionalization of teachers and the research thereof.

2.1 Mindset

An individual's mindset refers to their implicit beliefs regarding, among other constructs, ability, and is often dichotomized as entity beliefs versus incremental beliefs (Dweck & Leggett 1988; Dweck & Yeager 2019). A person who subscribes to an entity notion of ability believes that intelligence in one or more domains is static, or "fixed" in place. Alternatively, an individual who holds incremental beliefs regarding ability focuses on the notion that intelligence can be shaped and is dynamic. Studies on teachers' mindsets and related student performance conclude that teachers' fixed mindsets negatively affect students in such areas as motivation (Heyder, Weidinger, Cimpian & Steinmayr 2020), student autonomy (Leroy, Bressoux, Sarrazin & Trouilloud 2007), feedback types offered (Pishghadam, Meidani & Khajavy 2015), and strategic learning support (Bernecker & Job 2019). Given the importance of all of these constructs for foreign language learning, understanding the nature, development, and impact of EFL teachers' mindsets is critical, especially since teachers' mindsets might have a direct impact on student achievement. In fact, there are a variety of concepts in

foreign language learning that have direct or indirect parallels to aspects of mindset theory. However, specific studies of teachers' mindsets in EFL are sparse. These examine the way EFL teachers conceptualize abilities, while drawing on previous work on more general beliefs about language learning (Horwitz 1988). In the course of examining primary EFL teachers' diagnostic competence, Hochstetter (2011) revealed how mindsets regarding intelligence among her informants influence their diagnostic analyses. Similarly, Pishghadam et al. (2015) determined that those EFL teachers who subscribed to a dynamic mindset were less likely to provide corrective feedback, but more likely to provide strategic feedback to learners. Using mindset to examine EFL teachers' beliefs about their own teaching competence, Irie, Ryan & Mercer (2018) found that many preservice EFL teachers subscribe to the notion of language competence as an innate talent while subscribing to growth mindsets regarding their own teaching competence. In light of findings that teachers should emphasize the dynamic nature of language learning (Mercer & Ryan 2010), this indicates that there is a potentially significant disjuncture between these teachers' implicitly-held beliefs and effective teacher behaviors (cf. Jordan et al. 2009).

It is important to note that, despite substantial empirical evidence of the importance of mindset in affecting a variety of teaching and learning behaviors, there is also significant criticism of the ways in which the concept has been appropriated by educational theorists and practitioners. For example, classroom interventions that are identified as growth-oriented often do not consistently implement theoretically coherent pedagogies (Dweck & Yeager 2019). Moreover, the misapplication of mindset theories to sanction "deficit thinking," which suggests that the failure of particular students is due to their own incompetence or negative cultural traits – in this case, having a fixed mindset – rather than instructional features such as performance-oriented classrooms and structural characteristics such as racial, ethnic, or socioeconomic inequities, has led to significant criticism (Kohn 2015; Gorski 2018). However, these commentaries of mindset theories of learning emphasize not the problems with the theoretical construct itself, but the ways in which it has been interpreted and implemented in various educational settings.

The notion of mindsets in the context that they are being used in this study avoids these problems. First of all, the focus in the intervention described in 3.1 is on changing teachers' mindsets by addressing their exclusionary beliefs about inclusion in the language learning classroom through reflective activities, empirical evidence of dynamic language learning abilities, and opportunities to address questions of theory and practice. Thus, the emphasis is on addressing teachers' mindsets, not those of learners. Secondly, rather than focusing on the notion of mindset and anticipating concomitant changes in pedagogy, the learning opportunity designed in this context primarily addresses attitudes and practices regarding inclusion, with the assumption that these will lead to changes in underlying mindsets. Finally, examining mindsets of teachers in the pursuit of more inclusionary attitudes should avoid the unintended consequence of blaming learners for the challenges they may encounter in language learning. Indeed, the theoretical underpinning of the professional development sequence described in 3.1 emphasizes using reflection to address the role of the teacher in creating an accessible language learning environment and thus changing pedagogies to engage these learners as one element of an equity-oriented environment. Rather than focusing on learners' deficits, the spotlight is on strengthening teachers' capacity for instruction.

Given the negative effects of teachers' fixed mindsets on student achievement, intervention studies have examined whether these mindsets are themselves malleable. The ability of these interventions to change pre-existing beliefs illustrates how difficult it is to bring about such change, but that dedicated interventions may be able to achieve this goal (Caspari 2014; Anderson et al. 2018; Baust & Pachner 2020). The role of reflection here is paramount, with empirical evidence indicating that the key to changing implicit beliefs is to use reflective processes to make them explicit (Jordan et al. 2009; Hochstetter 2011).

2.2 Reflection

Despite a multitude of definitions and operationalizations that sometimes belie coherence (Schädlich 2019), strengthening (pre-service) teachers' reflective competence has become a clarion call for teacher education and professionalization in general and foreign language teaching more specifically (for an overview see Klempin 2019; Schädlich 2019). Not only is the lack of coherence in what is meant by reflective competence problematic; questions as to how and whether reflection as a complex and multi-faceted construct can be "taught," empirically measured, and transferred into practice have not been fully answered (Akbari 2007). Nevertheless, consensus regarding some of the core elements of teachers' reflections can be identified, including features of teacher reflection and processes for honing reflective skills.

At its most fundamental level, reflection is a process that refers to "thinking about thinking," and reflective activities seek to make this thinking explicit, exposing implicit orientations and beliefs that are usually mostly hidden from the individual, thus allowing them to be scrutinized and, finally, potentially changed (cf. Abendroth-Timmer 2017; Gerlach 2019). Given its social nature, i.e., the way in which practice is carried out within existing social structures which it also simultaneously affects, and is accompanied by social interaction with supervisors or peers, reflection cannot be conceptualized as an individual practice but rather takes place as a situated act within a particular community (Abendroth-Timmer 2017).

While such integrated reflection can take place in a number of ways (Gerlach 2019), any kind of professionalization activities must account for both affective and cognitive processes that accompany reflection. The goal is, ultimately, to develop a reflective competence that incorporates the use of subject-specific content and theories, the ability to explicate the use of said content and theories, and to retrospectively connect rationales for decisions that have been made with reference to experiential and theoretical knowledge of teaching and learning (Schädlich 2019). Finally, while reflection necessarily takes place retrospectively (Conway 2001). The challenge is thus to hone reflective skills *on action* in order to effect appropriate reflective practices *in action* (cf. Schön 1987). While this is logically a special challenge for pre-service EFL teachers with limited practical experience, research regarding the state of and growth of reflective competence and practice of experienced EFL teachers in Germany is largely absent (cf. Roters 2012; but see: Klempin 2019; Schädlich 2019).

There are likely multiple reasons for this lacuna. One reason for the lack of research in this area is likely due to the dearth of professional development opportunities that reflect sound principles of teacher professionalization (Huber 2020). Empirical evidence suggests that teachers' implicit cognitions and orientations, which have a significant influence on their actions, can be modified through professional development that is contextually situated, incorporating networked elements of theory, practice, and feedback, grounded in subject matter, and that provides both models of good practice and opportunities for collegial collaboration (Lipowsky & Rzejak 2019). However, the state of current professional practice too frequently does not reflect these guidelines, with offerings that are largely input-oriented or lacking adequate theoretical or content-related coherence (Huber 2020). Another reason for the absence of research regarding practitioners might have to do with the fact that tracing the reflections of experts poses methodological and philosophical challenges, given the implicit nature of their reflections that, alongside non-reflective routines, regularly take place quickly, subconsciously and are not necessarily expressed verbally (Roters 2012: 104-108)

While the study in which Jana and Marie took part did not identify a significant relationship between their beliefs and their reflective competence, correlations

between students' attitudes towards inclusion and reflective competence were identified (Blume et al. 2019a). Specifically, the data revealed that more welcoming attitudes towards heterogeneous instruction were coupled with higher levels of reflective competence. Notably, those students with lower levels of reflective competence were more likely to voice fixed mindsets than those students with higher levels of reflective competence, as illustrated with the examples in Table 1.

Table 1: Reflections based on prompts asking for means of differentiation in an English classroom setting.

"Static" Mindset and Low Reflective	"Dynamic" Mindset and Moderate Reflective
Competence	Competence
"Es könnten alle Schüler*innen den gleichen Text (mit gleicher Schwierig- keit) bekommen, danach aber Aufgaben mit unterschiedlichen Schwierigkeits- graden zur Bearbeitung bekommen. Die SuS bekommen die Aufgaben mit dem passenden Schwierigkeitsgrad."	"Eine Möglichkeit wäre, verschiedene Aufga- ben mit unterschiedlichen Schwierigkeitsgraden zur Verfügung zu stellen, aus denen der individu- elle Schüler selbst auswählen kann. So können die Kinder einen Wissenszuwachs auf verschie- dene Arten erlangen, werden aber nicht auf einem eindeutigen Levelvergleich gegenübergestellt und herausgestellt."

While the qualitative content analysis of participants' responses to the prompts focused on the reflective nature of these statements, they incidentally also reveal informants' mindsets. This suggests, firstly, that mindsets may need to be examined using a variety of quantitative and qualitative instruments. Moreover, the fact that students' reflective competencies developed over the course of the intervention suggest that mindsets, along with beliefs, can be changed over time. Finally, there are indications that developing reflective competence might be the method by which this transformation can occur. This results in the hypothesis that individuals with low reflective competence are more likely to have a fixed mindset whereas individuals with more sophisticated reflective competence are more likely to have a fixed mindset, evaluate them in terms of their fixed or dynamic nature, and react accordingly. Thus, the pivotal element that connects all other facets of professional competence may be reflective competence.

3. Fostering and researching mindsets and reflection in language teacher education and professional development

Given the potentially transformative nature of addressing mindsets in language teacher education for inclusive settings and its potential to be shaped in professional development settings, the course in which Jana and Marie took part in was – based on the research results – further developed into a professional development course for in-service teachers in schools in North Rhine-Westphalia. Table 2 illustrates, based on the different preconditions and contexts, the similarities and differences between both interventions, as well as the changes that were incorporated to allow for a greater focus on the construct of mindset and its potential connection to reflective competence. This shift in focus and research design also takes into account the expert status of in-service teachers compared to novice pre-service teachers (Bromme & Haag 2008).

The following chapter is divided into two parts: The first part will illustrate how the professional development opportunity was designed, based on the empirical findings of the first intervention and relevant results of research into the third phase of teacher professional development. The second part will summarize the research design and how it is organically integrated into the development opportunity. An overview of both elements is provided in Table 2.

	Intervention 1: Teaching in Inclusive English Settings	Intervention 2: <i>Qualifying</i> <i>Teachers for Innovative</i> <i>English Settings</i>
Overall structure	e, context(s), and delivery	
Thematic focus	Inclusive EFL in primary and early secondary grades, as well as vocational schools (<i>Grund-,</i> <i>Haupt-, Realschulen; Berufs-</i> <i>bildende Schulen</i>)	Teaching EFL in highly heterogene- ous settings in early secondary grades in all school forms (<i>Sekundarstufe 1</i> <i>der Haupt-, Real-, Gesamtschulen,</i> <i>sowie Gymnasien und Förderschulen</i>)
Context	 Mandatory course in a university program of studies (B.A.) Refers to school forms, regulations regarding inclusion and special needs, and structures applying to Lower Saxony 	 Voluntary teacher professional development opportunity (credit hours for in-service) Refers to school forms, regulations regarding inclusion and special needs, and structures in North Rhine-Westphalia. Includes specific links to, and material from, the state ministry of education

Table 2: Comparison of both interventions with key concepts

Didactic principles	 Principles of post-secondary education and first-phase teacher education Uses of digital media to facilitate inclusion is thematized as a separate topic Online and in-person sessions model pedagogical and didactic lesson design 	 Principles of teacher professional development and lifelong profes- sional growth Uses of digital media to facilitate inclusion is largely implicit Online and in-person sessions model pedagogical and didactic lesson design 	
Development	Theory-practice network, in- cluding university students and teachers in the second phase of professionalization	Theory-practice network, including expert teachers in teacher professional development	
Role of the learning management system (LMS)	LMS offers multimodal resources, and uses interactive elements to gen- erate empathy, deepen participants' knowledge, and facilitate autono- mous self-assessment and reflection		
Blended learning	Weekly preparation online, fol- lowed by a weekly in-person seminar for 14 weeks Four modules online, each follower by an in-person professional devel opment day over the course of on school year		
Role of theory, practice, and knowledge transformation			
Case studies	Drawn from practitioners in- volved in the development of the course	Teachers draw on their own experiences regarding specific issues	
Role of videography	 Multi-perspective videos rec- orded in a wide range of settings and made available through the Multiview video database Used primarily in in-person seminar settings as illustrations of various practice, to scaffold pre-service teachers' ability to notice and analyze critical inci- dents Recordings include classroom instruction and teacher inter- views 	 Multi-perspective videos recorded in cooperation with QUA-LiS NRW, using lessons aligned with the current curricula in the relevant grades in North Rhine-Westphalia Used in both online and in- person settings as illustrations of good practice, to deepen experienced teachers' ability to notice and analyze multiple, simultaneous critical inci- dents Recordings include classroom in- struction and interviews with teach- ers and with learners 	

Reflective elements	 Participants reflect on their personal experiences as EFL learners Reflective elements serve to address questions of theoretical and practical know-ledge Reflection takes place primarily through online forums and in-person discussion Reflective elements are generally optional and incorporated sporadically 	 Participants reflect on their personal experiences, and on those of other teachers, as EFL practitioners Reflective elements serve to address questions of theoretical and practical knowledge Reflection takes place in a variety of online formats, including journal entries, opinion surveys, and online forums Reflective elements are mandatory elements that precede and follow each online module
Differentiation	Participants have a variety of multimodal texts, in both English and German, from which to draw in order to de- velop their knowledge, heighten their awareness, and identify ef- fective teaching strategies	In addition to a variety of multimodal texts, primarily in English, partici- pants may select from various the- matic foci to reflect their interests and contextualized professional de- velopment needs.
Community of Practice	 Participants periodically collaborate with fellow seminar participants on specific tasks Participants are individually afforded opportunities to speak with experts on specific topics 	Participants enroll in the course with a colleague from their school follow- ing approval in the school conference to facilitate a further dissemination of the content and concepts among the de- partment's staff.
Lesson design	 Participants work collabora- tively to adapt an instructional phase in an existing lesson plan Participants collaboratively develop, carry out, and reflect a recorded microteaching lesson 	 Participants adapt pre-existing lesson materials and lesson designs to better accommodate individual learners' needs and the needs of the instructional group Participants use scaffolding to develop a unit plan based on principles of task-based language learning (TBLL)
Multiprofes- sional teams	The focus is on co-teaching	The focus is on the variety of people with whom the classroom teacher cooperates to meet the needs of all learners in a variety of collabo- rative settings

Research focus & methodology		
Research	 Exploratory focus on attitudes towards inclusion, general be- liefs about language learning, and reflective competence regarding inclusive EFL Instruments include pre- and post-intervention surveys with closed and semi-open items 	 Descriptive focus on attitudes to- wards inclusion, mindsets regarding language learning, and reflective competence regarding EFL in highly heterogeneous settings Instruments include pre- and post- intervention surveys with closed and semi-open items, as well as periodic reflective prompts accompanying each unit

3.1 Designing an intervention: QualiTIES

In order to address the professionalization needs of experienced EFL teachers as regards broadly inclusive language teaching and learning, an intervention was designed in accordance with didactic and methodological principles of teacher further education (Lipowsky & Rzejak 2019), focusing on the pedagogical content knowledge needed to teach effectively in inclusive EFL settings. A theory-practice network consisting of subject area and special education teachers, representatives of university-level EFL didactics, digital learning designers, and experts in teacher professional development, special educational needs, and EFL curriculum development utilized various forms of collaboration, including episodic co-constructive and independent, partner, and small group formats to construct a blended learning course for EFL teachers in early secondary classroom settings (Blume et al. 2019b).

Designed to both be tailored to individual teachers' needs and to reflect principles of sociocultural learning through interaction, the course, titled *Quali-TIES: Qualifying Teachers for Innovative English Settings,* intersperses online elements with face-to-face sessions. Online activities, embedded within a learning management system (LMS), enable participants to experience autonomy in a mastery-learning approach by, for examples, providing options for varying areas of focus, offering multiple, multimodal sources of input, and incorporating assessments that offer immediate feedback regarding the declarative knowledge that is presented. Experiential activities, including digital simulations, are followed by reflective opportunities that can be completed individually and discussed in moderated forums, to address participants' implicit beliefs and facilitate the transfer to actionable knowledge.

Drawing on research that highlights the potential of classroom videography in reflective EFL teacher development (Abendroth-Timmer 2017), the course makes liberal use of multiperspective classroom video recordings. In contrast to traditional classroom videography that tends to record the teacher or the students as an undifferentiated group, multiperspective videography makes it possible to focus on one student or small group of students while at the same time documenting the actions of the teacher and the other learners in the classroom. In this way, multiple perspectives convey the parallel nature of multiple classroom incidents while simultaneously honing in on the learning processes of individual students.⁵ This approach is especially suited to highly differentiated settings where small groups of learners pursue various activities at the same time and the teacher interacts with individual students or student pairs, and early research indicates that it may contribute more effectively to the development of inclusive EFL professional vision than traditional classroom videography (Blume & Schmidt 2020). The videos in this course are adapted from lessons designed by the QUA-LiS NRW, and are contextualized by synopses of the lessons, complete lesson plans, worksheets, learner products, and reflective student and teacher interviews.

Teachers in the pilot implementation of the intervention represent all secondary school forms in North Rhine-Westphalia. As an important prerequisite for participation, teachers enroll with a colleague from the same school. In this way, the development of communities of practice is facilitated, situated aspects of individual practice can be more easily addressed, and opportunities for broader schoolwide development are increased.

The online elements of the learning opportunity are flanked by and interleaved with face-to-face sessions led by expert teachers. The face-to-face sessions, by drawing on the sociocultural nature of knowledge development in interaction, provide opportunities for the participants to deepen individual reflection, engage in further critical analysis of their practice, and facilitate the transformation of declarative and theoretical knowledge derived through the online elements into classroom practice. More prosaically, the face-to-face sessions can strengthen the functional nature of the cohort as a professional learning community, especially in light of the fact that teachers are drawn from various school forms and communities. Finally, the in-person sessions support the incidental learning and technology-related needs that arise in relation to the digital tools used in the online sessions.

The content of QualiTIES is arranged in four online modules, all of which focus on the development of EFL teaching competence in inclusive EFL classes

⁵ For more details on multiperspective videography, see multiview.leuphana.de.

of the early secondary school years (grades 5 through 10). While all four modules incorporate the aforementioned didactic and methodological principles, the content focus of each module emphasizes a different aspect of teaching EFL in diverse settings. Among other aspects, participants are introduced to the principles and elements of Task-based Language Learning (TBLL) before examining a planning model by which teachers can conceptualize a unit of instruction that is driven by a competence orientation and takes into account learners' various developmental, cognitive, and affective needs (Eßer, Gerlach & Roters 2018). Finally, in Module 4, participants apply this model to creating or modifying their own (pre-existing) unit plan.

To scaffold participants' ability to abstract schemata from these concrete examples (Akbari 2007; Neuweg 2019), each module begins and ends with a brief description of a fictitious EFL class and a typical classroom situation or lesson. Participants are then asked to describe their understanding of the situation or the lesson, and how they would address the issues or design instructional sequences in light of the given information. Designed as reflective opportunities, these vignettes are also conceptualized as data sources that document what are anticipated to be participants' shifting mindsets.

3.2 Researching the intervention

Given the comparative infrequency with which the aforementioned constructs have been studied within the context of a professional learning opportunity for inclusive EFL (cf. 2.1 and 2.2), the research accompanying this initiative is largely exploratory. Adapted from Blume et al. (2019a), the research has three primary goals:

- (1) to inform our understanding of EFL teachers' inclusive attitudes, mindsets, and reflective competence;
- (2) to identify the ways in which mindsets relate to inclusive attitudes and reflective competence among experienced EFL educators;
- (3) to trace the subject-specific development of these attitudes, mindsets, and reflective competence over the course of a professional learning opportunity that reflects best practices in teacher further education.

In this way, the concomitant research contributes to the development and empirical evaluation of local theories on content-specific professionalization processes in accordance with principles of design-based research (Prediger et al. 2016). Additionally, the research reflects an integral component of the cyclical professional development process, creating an opportunity for the pilot sequence to be revised in light of the data-based findings before being implemented again.

The instruments used to evaluate these myriad constructs and inform further development processes include both quantitative and qualitative instruments. Originally used in this combination to examine the seminar that has been part of the curriculum for students pursuing a bachelor's degree in teaching EFL at the Leuphana University Lüneburg since 2017, the pre-test and post-test questionnaires include items adapted from previously-validated instruments (Table 3). Whereas the research carried out in this initial course focused on the effects of the intervention by evaluating initial and final attitudes, beliefs, and reflections, the study of QualiTIES additionally includes the use of text-based vignettes during interim phases of the course. In this way, a more dynamic and comprehensive picture of teachers' reflective development can be derived. Moreover, the scale measuring teachers' mindsets reflects analyses of the data collected in the prior study. Originally excerpted from a longer instrument on beliefs (Horwitz 1988), the newly validated instrument distinguishes between items that correspond with a growth mindset and those that reflect a fixed mindset. In this way, the current examination delves more deeply into the participants' beliefs whilst providing a precise conceptual framework. Thus, the questionnaire is more succinct even as it provides more nuanced data.

No. of items	Designation	Construct being measured	Adaptation
5	Demographic data	Allow for sub- group controls	N/A
15	BALLI: Beliefs About Language Learning (Horwitz 1988)	Mindsets	The original scale is reduced to 15 items that load on 3 components (nature of lan- guage learning, difficulty of learning English, individual differences in lan- guage learning) and distinguish between fixed/growth mindsets.
2	TEDS-LT (Roters, Nold, Haudeck, Keßler & Stancel-Piątak 2011)	Reflective competence	Originally designed to measure EFL teacher knowledge, the questions have been reformulated as open-ended items to emphasize reflective competence in heterogeneous EFL settings.

Table 3: Instruments used to	research QualiTIES
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7	ATIS: Attitudes Towards Inclusion Scale (Schwab, Tretter & Gebhardt 2014)	Attitudes towards inclusion	The items have been reformulated to focus specifically on inclusive EFL.
4	Reflective vignettes (piloted by Gerlach, un- published)	Reflective competence	Open-ended items at the beginning and conclusion of each LMS-based module designed to capture the development of reflective competence and changes in mindset.

Despite the formal capacity to associate individual informants' responses to the quantitative questionnaires with their reflective responses to the vignettes, concerns regarding data privacy preclude the association of individual reflections with the pre-test and post-test surveys. While this limits to some degree our ability to trace individual development over the course of the year-long intervention, it is nevertheless possible to analyze cohort-wide trends and patterns. Given the multiple roles of the researchers as co-designers and facilitators, participant acceptance of the research study is a fundamental principle of the data collection processes.

4. Instead of a conclusion

Jana's and Marie's mindsets and attitudes at the beginning of the learning opportunity, as described in the introduction, evolved over the course of the intervention, with their reflective competence demonstrating some development as well:

Jana continues to believe that language learning is difficult for many, but not all, learners, although she now thinks the reasons for these differences depend on a variety of factors, including age of first exposure and the motivation provided by different types of instructional activities. As such, she thinks that it is possible for language learning ability and success to change over time, and that the process of learning English is highly complex. Given this heterogeneity, Jana still is of the opinion that English classes should reflect these individual differences by offering learners choices that reflect their interests and abilities. She thinks it might be difficult for teachers to address all learners' needs in heterogeneous settings, indicating that separate classes can achieve this differentiation more readily.

Marie has not changed her mind about the role of hard work in language learning, and she continues to focus on the importance of skill-building in the areas of grammar and vocabulary in attaining competence, as she did at the outset. She is able to identify specific ways to make these language areas more accessible for learners with special educational, emotional, or cognitive needs. Marie still believes that learning English is difficult, and she

is slightly less sure than she was at the start of the seminar whether all learners can achieve a high degree of competence. While, it is, in her mind, important to design instruction so that all learners experience success and linguistic growth in the heterogeneous English classroom, she also questions whether this is possible.

As can be seen from this description, both Jana's and Marie's attitudes and beliefs evolved as a result of the instruction they enjoyed. However, the changes that took place defy easy categorization or analysis. Whereas Jana's mindset clearly became more dynamic in that she came to recognize the variety of factors that can change over time affecting learners' language learning, Marie's mindset can be described as becoming somewhat more fixed, coming to believe that some learners, on the basis of specific characteristics, may struggle more than others with language learning. Given the more reflective nature of their comments at the close of the semester than at the beginning, these attitudes and beliefs suggest that persistently neutral or negative attitudes towards inclusive instruction following a targeted intervention may reflect a growing awareness of and potential reflective stance towards the complexity of inclusive foreign language teaching and learning, especially among learners with low self-efficacy beliefs (Martschinke & Kopp 2009). It remains to be seen whether a comparable intervention, adapted to take the differences between pre-service teachers and experienced educators regarding reflective competence into account (Wyss 2013), can contribute to the development of inclusive attitudes and dynamic mindsets.

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References

- Abendroth-Timmer, Dagmar (2017): Reflexive Lehrerbildung und Lehrerforschung in der Fremdsprachendidaktik: Ein Modell zur Definition und Rahmung von Reflexion. Zeitschrift für Fremdsprachenforschung 28: 1, 101-126.
- Akbari, Ramin (2007): Reflections on reflection: A critical appraisal of reflective practices in L2 teacher education. *System* 35: 2, 192-207.
- Anderson, Robin; Boaler, Jo & Dieckmann, Jack (2018): Achieving elusive teacher change through challenging myths about learning: A blended approach. *Education Sciences* 8: 3, 98.
- Baust, Christina & Pachner, Anita (2020): Ergebnisse zur forschungsbasierten Entwicklung, Implementation, Evaluation und Weiterentwicklung eines Fortbildungsangebotes f
 ür Lehrkr
 äfte zum "Professionellen Umgang mit heterogenen Lerngruppen". Journal f
 ür Psychologie 27: 2, 263-287.
- Bernecker, Katharina & Job, Veronika (2019): Mindset theory. In: Sassenberg, Kai & Vliek, Michael L.W. (eds.): *Social Psychology in Action*. Cham: Springer, 179-194.

- Blume, Carolyn; Gerlach, David; Roters, Bianca & Schmidt, Torben (2019a): The ABCs of inclusive English teacher education: Attitudes, beliefs, and (reflective) competence. *TESL-EJ* 22: 4, 1-18.
- Blume, Carolyn; Gerlach, David; Roters, Bianca & Schmidt, Torben (2019b): Didaktische und methodische Ansätze zur Entwicklung der fachdidaktischen Inklusionskompetenz von angehenden Fremdsprachenlehrkräften. *Herausforderung Lehrer_innenbildung* 2: 3, 296-322.
- Blume, Carolyn & Schmidt, Torben (2020): All kinds of special: Using multi-perspective classroom videography to prepare EFL teachers for learners with special educational needs. In: Lenz, Friedrich; Frobenius, Maximiliane & Klattenberg, Revert (eds.): Classroom Observation. Berlin: Peter Lang, 201-224.
- Bonnet, Andreas & Hericks, Uwe (2019): Professionalität und Professionalisierung als biographische Bearbeitung der Spannungen zwischen Norm und Habitus. In: Kramer, Rolf-Torsten & Pallesen, Hilke (Hrsg.): Lehrerhabitus – theoretische und empirische Beiträge zu einer Praxeologie des Lehrerberufs. Bad Heilbrunn: Klinkhardt, 101-123.
- Bromme, Rainer & Haag, Ludwig (2008): Forschung zur Lehrerpersönlichkeit. In: Helsper, Werner & Böhme, Jeanette (Hrsg.): *Handbuch der Schulforschung*. Wiesbaden: VS Verlag für Sozialwissenschaften, 803-820.
- Caspari, Daniela (2014): Was in den Köpfen von Fremdsprachenlehrer(inne)n vorgeht, und wie wir versuchen, es herauszufinden: Eine Übersicht über Forschungsarbeiten zu subjektiven Sichtweisen von Fremdsprachenlehrkräften (2000-2013). *Fremdsprachen Lehren und Lernen* 43: 1, 20-35.
- Conway, Paul F. (2001): Anticipatory reflection while learning to teach: From a temporally truncated to a temporally distributed model of reflection in teacher education. *Teaching and Teacher Education* 17: 1, 89-106.
- Dweck, Carol S. & Leggett, Ellen L. (1988): A social-cognitive approach to motivation and personality. *Psychological Review* 95: 2, 256-273.
- Dweck, Carol S. & Yeager, David S. (2019): Mindsets: A view from two eras. Perspectives on Psychological Science 14: 3, 481-496.
- Eßer, Susanne; Gerlach, David & Roters, Bianca (2018): Unterrichtsentwicklung im inklusiven Englischunterricht. In: Roters, Bianca; Gerlach, David & Eßer, Susanne (Hrsg.): *Inklusiver Englischunterricht*. Münster: Waxmann, 9-26.
- Gerlach, David (2019): Implizite Reflexion: Grundzüge einer Förderung handlungsrelevanter Reflexionskompetenz für (angehende) Lehrpersonen. *SEMINAR* 25: 1, 41-48.
- Gerlach, David; Roters, Bianca & Steininger, Ivo (2020): Zur Spezifik fremdsprachendidaktischer Professionsforschung: Unterrichtsplanung als Kategorie für Professionalisierungsprozesse. *Fremdsprachen Lehren und Lernen* 49: 1, 113-130.
- Gorski, Paul (2018): Reaching and Teaching Students in Poverty: Strategies for Erasing the Opportunity Gap. New York: Teachers College Press.
- Gutshall, C. Anne (2013): Teachers' mindsets for students with and without disabilities. *Psychology in the Schools* 50: 10, 1073-1083.
- Heyder, Anke; Weidinger, Anne F.; Cimpian, Andrei & Steinmayr, Ricarda (2020): Teachers' belief that math requires innate ability predicts lower intrinsic motivation among low-achieving students. *Learning and Instruction* 65, 101220.
- Hochstetter, Johanna (2011): Diagnostische Kompetenz im Englischunterricht der Grundschule. Eine empirische Studie zum Einsatz von Beobachtungsbögen. Tübingen: Narr.
- Horwitz, Elaine K. (1988): The beliefs about language learning of beginning university foreign language students. *Modern Language Journal* 72: 3, 283-294.

- Huber, Christian (2020): Stellungnahme zum Antrag "Die Lehrerfortbildung zeitgemäß und passgenau weiterentwickeln" [Online: www.landtag.nrw.de/portal/WWW/dokumentenarchiv/ Dokument/MMST17-2750.pdf, 24.07.2020].
- Irie, Kay; Ryan, Stephen & Mercer, Sarah (2018): Using Q methodology to investigate pre-service EFL teachers' mindsets about teaching competences. *Studies in Second Language Learning and Teaching* 8: 3, 575-598.
- Jordan, Anne; Schwartz, Eileen & McGhie-Richmond, Donna (2009): Preparing teachers for inclusive classrooms. *Teaching and Teacher Education* 25: 4, 535-542.
- Klempin, Christiane (2019): Reflexionskompetenz von Englischlehramtsstudierenden im Lehr-Lern-Labor-Seminar: Eine Interventionsstudie zur Förderung und Messung. Stuttgart: Metzler.
- Kohn, Alfie (2015): The perils of "Growth Mindset" education: Why we're trying to fix our kids when we should be fixing the system. *Salon*, 16.8.2015 [Online: www.salon. com/2015/08/16/the_education_fad_thats_huring_our_kids_what_you_need_to_know_about_growth_mindset_theory_and_the_harmful_lessons_it_imparts/, 18.9.2020].
- Kopmann, Henrike & Zeinz, Horst (2016): Lehramtsstudierende und Inklusion. Zeitschrift für Pädagogik 2, 263-281.
- Leroy, Nadia; Bressoux, Pascal; Sarrazin, Phillippe & Trouilloud, David (2007): Impact of teachers' implicit theories and perceived pressures on the establishment of an autonomy supportive climate. *European Journal of Psychology of Education* 22, 529-545.
- Lipowsky, Frank & Rzejak, Daniela (2019): Was macht Fortbildungen f
 ür Lehrkr
 äfte erfolgreich? – Ein Update. In: Groot-Wilken, Bernd & Koerber, Rolf (Hrsg.): Nachhaltige Professionalisierung f
 ür Lehrerinnen und Lehrer: Ideen, Entwicklungen, Konzepte. M
 ünster: Waxmann, 15-56.
- Lou, Nigel M. & Noels, Kimberly A. (2019): Language mindsets, meaning making, and motivation. In: Lamb, Martin; Csizér, Kata; Henry, Alastair & Ryan, Stephen (eds.): *The Palgrave Handbook of Motivation for Language Learning*. Cham: Springer, 537-560.
- Martschinke, Sabine & Kopp, Bärbel (2009): Selbstreflexives und forschendes Lernen als Mittel zum Erwerb günstiger Orientierungen für den Umgang mit Heterogenität. Eine hochschuldidaktische Studie. In: Abel, Jürgen & Faust, Gabriele (Hrsg.): *Wirkt Lehrerbildung? Antworten aus der empirischen Forschung*. Münster: Waxmann, 291-299.
- Mercer, Sarah & Ryan, Stephen (2010): A mindset for EFL: Learners' beliefs about the role of natural talent. *ELT Journal* 64: 4, 436-444.
- Neuweg, Georg H. (2019): Könnerschaft und implizites Wissen: Zur lehr-lerntheoretischen Bedeutung der Erkenntnis- und Wissenstheorie Michael Polanyis. Münster: Waxmann.
- Pishghadam, Reza; Meidani, Elham N. & Khajavy, Gholam H. (2015): Language teachers' conceptions of intelligence and their roles in teacher care and teacher feedback. *Australian Journal of Teacher Education* 40: 1, 60-82.
- Prediger, Susanne; Schnell, Susanne & Rösike, Kim-Alexandra (2016): Design research with a focus on content-specific professionalization processes: The case of noticing students' potentials. In: Zehetmeier, Stefan; Rösken-Winter, Bettina; Potari, Despina & Ribeiro, Miguel (eds.): Proceedings of the Third ERME Topic Conference on Mathematics Teaching, Resources and Teacher Professional Development. Berlin, 96-105.
- Roters, Bianca (2012): Professionalisierung durch Reflexion in der Lehrerbildung: Eine empirische Studie an einer deutschen und einer US-amerikanischen Universität. Münster: Waxmann.

- Roters, Bianca; Nold, Günter; Haudeck, Helga; Keßler, Jörg-U. & Stancel-Piątak, Agnes (2011): Professionelles Wissen von Studierenden des Lehramts Englisch. In: Blömeke, Sigrid; Bremerich-Vos, Albert; Haudeck, Helga; Kaiser, Gabriele; Nold, Günter; Schwippert, Knut & Willenberg, Heiner (Hrsg.): Kompetenzen von Lehramtsstudierenden in gering strukturierten Domänen: Erste Ergebnisse aus TEDS-LT. Münster: Waxmann, 77-100.
- Schädlich, Birgit (2019): Fremdsprachendidaktische Reflexion als Interimsdidaktik. Stuttgart: Metzler.
- Schön, Donald A. (1987): Educating the Reflective Practitioner: Toward a New Design for Teaching and Learning in the Professions. San Francisco, CA: Jossey-Bass.
- Schwab, Susanne; Tretter, Tobias & Gebhardt, Markus (2014): Entwicklung und Überprüfung eines fallbasierten Instruments zur Messung der Einstellung zur schulischen Integration: Wie denken Studierende, Berufstätige und Schüler/innen über schulische Integration von Kindern mit sonderpädagogischem Förderbedarf? Vierteljahresschrift für Heilpädagogik und ihre Nachbargebiete 83: 1, 20-32.
- Terhart, Ewald (2011): Lehrerberuf und Professionalität. Gewandeltes Begriffsverständnis neue Herausforderungen. In: Helsper, Werner & Tippelt, Rudolf (Hrsg.): *Pädagogische Professionalität*. Weinheim: Beltz, 202-224.
- Wyss, Corinne (2013): Unterricht und Reflexion: Eine mehrperspektivische Untersuchung der Unterrichts- und Reflexionskompetenz von Lehrkräften. Münster: Waxmann.