

MIND THE GAP — RESEARCH AND PRACTICE IN TEACHER EDUCATION

Forschung kann wertvolle Impulse für den Unterricht geben, doch viele Erkenntnisse finden nachweislich nur schwer den Weg in die Praxis. Dieser Artikel geht den möglichen Ursachen dafür nach und beleuchtet, wie in einer evidenzbasierten Lehrpersonenbildung professionelle Kompetenzen aufgebaut werden können. Ausgehend von Beispielen aus der eigenen Lehre und Forschung zeigt die Autorin, wie Forschungsergebnisse für Lehrpersonen zugänglich und nutzbar werden, insbesondere wenn dabei an konkrete berufliche Situationen angeknüpft wird. Der Beitrag plädiert für einen Perspektivenwechsel: weg von der häufig zitierten Kluft zwischen Forschung und Praxis, hin zu einem integrativen Ansatz, der das Denken, Handeln und die berufliche Entwicklung von Lehrpersonen langfristig miteinander verbindet.

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Evidence-based language teacher education: the benefits

The divide between research and practice is a well-recognized phenomenon that extends far beyond the field of education. A quick internet search for the term “research-practice gap” reveals its presence in areas such as medicine, nursing, business or public administration. Language education is no exception. In recent decades, the so-called empirical turn of pedagogy has prompted increasingly frequent calls to integrate research into teacher education (Buchhaas-Birkholz, 2010; Hartmann et al., 2017). These calls are grounded in the belief that engaging with research fosters the development of professional expertise, enabling teachers to make informed decisions based on reliable evidence (Brühwiler et al., 2024; Leutwyler et al., 2022). While this rationale is compelling, the integration of research into actual teaching practice appears to remain limited (Bakkenes et al., 2010; Darling-Hammond & Richardson, 2009). Yet research findings do have the

potential to inform teacher education in multiple ways: by correcting misconceptions, guiding instructional choices, and helping to uncover and address implicit bias (Locher, 2024).

For example, there is plenty of evidence to show that the quantity and quality of exposure are key factors affecting language learning and acquisition (Ellis, 2002; Tomasello, 2005). This insight helps understand that first language acquisition differs from foreign language learning and that immersive language learning environments differ from classroom-based foreign language instruction involving only a few lessons per week (DeKeyser, 2000; Muñoz, 2008). Teachers who understand these differences can better assess whether and to what extent certain methods, especially those relying on implicit learning, are suitable for their specific teaching contexts. Informed by research, they may understand that in instructed foreign language learning, opportunities for incidental learning are limited and that balancing

meaning-focused and form-focused activities makes sense (Elgort et al., 2018; Laufer, 2009; Nation, 2022).

Evidence is also essential in evaluating the effectiveness of teaching trends, tools, and interventions. For instance, a survey among secondary and tertiary-level teachers revealed widespread concern about the use of digital translation tools and online dictionaries and their potentially detrimental impact on learning (Udry & Berthele, 2023). In our lab, we addressed this concern through a quasi-experimental study examining whether online dictionary use during a meaning-focused reading activity supported vocabulary learning. Results showed that learners using online dictionaries retained significantly more words than those using paper dictionaries or glossaries, suggesting that digital tools can support learning when integrated meaningfully (Udry & Berthele, 2025). A follow-up study investigated whether vocabulary retention differed when students used digital or paper flashcards. While the medium itself had no significant effect (students learnt equally well with Quizlet and physical flashcards), higher gains were observed when students used pre-made, rather than self-made cards (Udry & Berthele, submitted), supporting evidence that retrieval practice enhances retention (Barcroft, 2007; Nakata, 2016).

Beyond informing pedagogy, research can also challenge bias fuelled by intuition or anecdotal evidence. One persistent belief in foreign language education is that students with special educational needs (SEN) may be overwhelmed by the demands of language learning (Doherty & Nold, 2015). Given that these students count among the most vulnerable learner groups, such concerns are valid and require systematic investigation. To this aim, our research group analysed data from a study examining individual differences in instructed foreign language learning with 453 primary school children of which 116 were classified as having SEN. Skill development was assessed longitudinally at three time points over two academic years. Although SEN students scored lower on average, they demonstrated progress over time, with no evidence of stagnation or regression at group level (Udry & Berthele, 2022). These findings counter deficit-oriented assumptions and provide a more

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nuanced, data-informed view, suggesting that students with SEN can benefit from sustained language instruction. It is important to note that this research cannot provide specific recommendations for teaching, evaluate the quality of special educational needs provision, or assess whether SEN children met specific curricular benchmarks. Nevertheless, the data highlights developmental trends that may prompt reflection on common assumptions and support further inquiry into inclusive teaching practices.

In sum, research can inform teacher thinking and guide them toward evidence-based choices (e.g. should I use online dictionaries in my classroom or not? Is there an advantage in using digital or paper flashcards for deliberate vocabulary learning?). Moreover, findings can be integrated with broader theoretical frameworks (e.g. recognizing differences between first language acquisition and instructed foreign language learning) to understand how learning contexts differ (e.g. immersive classrooms versus input-limited classrooms) and why the effectiveness of specific methods relates to the learning environment (e.g. incidental and deliberate learning, focus-on-meaning and focus-on-form).

Reasons for the gap between research and practice

Although these benefits appear obvious, they are limited by the fact that they remain at the cognitive level of understanding. Also, the information may simply come at the wrong time when teachers are not ready to make sense of it for their practice. Generally, teachers favour research findings that are meaningful for their classroom (Borg, 2009, 2010). This implies that teachers do not seem to resist research itself, but research that feels removed from their professional realities. A promising approach to bridging theory and practice therefore begins with the questions teachers ask, questions that emerge from their own contexts.

In what follows, I share an example from my own work as a teacher educator to illustrate how a contextualized, inquiry-based approach can unfold in practice. One illustrative case comes from a professional development course in French language methodology. In-service teachers participating in this two-semester course raised questions about student motivation to learn French, a school subject often and anecdotally perceived as unpopular. Rather than simply confirming or refuting this perception, the goal became to foster understanding and a shift from reflection to action. We began by examining available research on learner motivation and compare it to students' own assumptions. This process eventually led to a classroom inquiry and the collection of motivation-enhancing activities.

To support this process, I drew on data from a collaborative project between the University of Teacher Education Zurich and the Institute of Multilingualism in Fribourg. The project examined how cognitive, affective-motivational, and language-related factors affected instructed foreign language learning over time (Berthele & Udry, 2021). This data showed that, overall, learning motivation was indeed higher for English than for French, even among learners living near French-speaking communities (Steiner, 2021a, 2021b). I also shared data from the cohort of 4th graders who were about to

start learning French as a 2nd foreign language in 5th grade. These children were asked about their expectations and surveyed again after one semester of French instruction. While their intrinsic motivation declined slightly, their self-related beliefs showed encouraging development. Specifically, their academic self-concepts (i.e. personal beliefs about one's ability to succeed in learning French; Mercer, 2011) improved. Moreover, their future self (i.e. how they envision themselves as future users of French; Dörnyei, 2009) remained consistent (Figure 1). Taken together, the empirical evidence offered a more nuanced view. While it supported the popular belief that English is generally more appealing, it also challenged the simplistic narrative that “no one likes French”.

To help teachers connect these insights to their own classrooms, I invited them to conduct brief surveys with their pupils. The results, once again, told a more differentiated story: while some children expressed low motivation, others showed genuine interest. By comparing their classroom data with broader research findings, teachers were able to challenge broad assumptions and recognise the differences within their own classrooms. In the final phase, course participants gathered activities that addressed their pupils' interests, thus bringing their reflections into action.

This is a tangible (but by no means validated) attempt to bridge understanding and action in teacher learning. What it is lacking, however, is the transfer into sustained practice, or the link to “becoming” a teacher.

How teachers learn: thinking, acting, and becoming

Many models of teacher education assume that behaviour follows thought. Once teachers engage with research and understand how learning works, they will naturally apply those insights in practice. While intuitively appealing, this assumption oversimplifies the complexities of teaching and learning. It also reveals a misconception of how teachers learn.

Teaching is fast-paced, emotionally charged and cognitively demanding. In

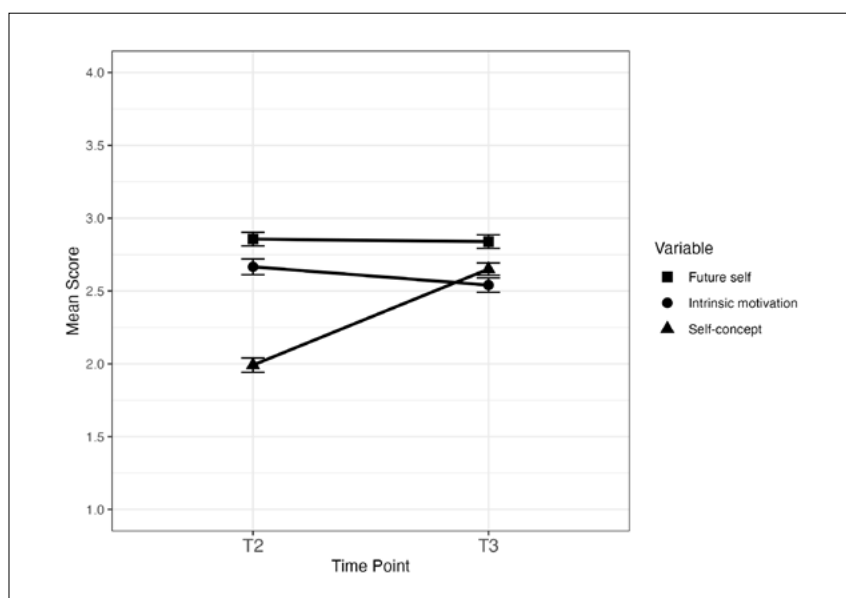


Figure 1
Development of French motivation between 4th and 5th grade. T2 = expectations of learning French assessed in 4th grade. T3 = attitudes towards French learning after one semester of French instruction.

the moment, teachers cannot always act deliberately on what they know. Instead, they rely on patterned responses shaped by personal history, rather than conscious reflection or theoretical understanding. Case studies show that when under pressure, teachers tend to abandon communicative or learner-centred methods in favour of more controlled, teacher-directed approaches that echo their own school experiences (Pennington & Richards, 1997; Rankin & Becker, 2006). In these moments, the need for control overrides pedagogical ideals.

Also, while connecting to teachers' own questions is commendable, pre-service teachers often lack the classroom experience, or the cognitive space, to formulate such questions meaningfully. Early on, they tend to focus their energy on coping with immediate demands and "the basics" rather than engaging in reflection. Moreover, the extent to which theory can be internalised depends on individual readiness and prior experience. Building professional expertise involves the full person with their histories, their cognitive, emotional, social, and cultural dispositions (Korthagen, 2017). Conditions for teachers to grasp theoretical insights can be improved by providing them with opportunities to apply these insights repeatedly in low-stakes, scaffolded practice environments (e.g. micro-teaching or supervised classroom placements). This aligns with the core practices approach to teacher education, which emphasizes the acquisition of essential instructional strategies through cycles of rehearsal, feedback, and reflection on the relevant theory (Fraefel, 2020; Grossman, 2021). Such opportunities allow teachers to integrate theoretical insights into their professional identity and repertoire through sustained experience.

From evidence-based to evidence-oriented

Shifting the focus from theory-centred to person-centred affects how evidence is defined. A common illustration of evidence-based practice comes from medicine (Rochnia et al., 2022). There, evidence is typically derived from controlled, double-blinded studies intended to support clear treatment recommendations, often formalized in package inserts specifying administration and

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dosage guidelines for different populations. Education, by contrast, is a far more context-dependent field, shaped by social, cultural, and institutional factors that defy such neat generalisations.

Educational research spans diverse methodologies, including (quasi)experimental studies, case studies, questionnaire surveys, classroom observations, large-scale-assessments and more. Each of these approaches provides partial, situated insights. This diversity makes it difficult to derive general "best practices" from research findings. Crucially, research does not claim to offer blueprints for teaching. This is a common misconception and overall, researchers would recognize that providing a one-size-fits-all solution for teaching is neither possible nor the aim of their scientific inquiry.

To deal with this issue, scholars have proposed to move from an "evidence-based" to an "evidence-oriented" approach in teacher education (Bauer & Kollar, 2023; Wilkes & Stark, 2023). Instead of prescribing universal principles, this perspective seeks to offer guidance that supports teachers in making sense of scientific evidence within their own professional environment. Evidence-orientation is person-centred and becomes a lens through which teachers critically examine their practice.

While this model promises better alignment between research and classroom realities, it also raises critical concerns. An evidence-oriented approach allows for a high degree of subjectivity as to what counts as evidence, how and by whom it is selected and interpreted. Like all people, teachers are influenced by personal biases, selective attention, and emotional framing. Since evidence orientation could easily be used to confirm existing beliefs rather than to question them, opportunities for dialogue are necessary for successfully implementing the approach.

Rethinking the link: a realistic approach

The recurring call to bridge research and practice oversimplifies the complex, developmental nature of becoming a teacher. It suggests that better communication or more accessible summaries of research could resolve the problem. Yet the issue runs deeper.

As this paper has argued, the assumption that teacher action simply follows from consciously held, research-informed beliefs does not fully capture how professional practice actually develops. Such a view tends to overlook the role of personal background, individual readiness, and the importance of repeated opportunities for trial and error.

Drawing on models like Korthagen's (2010, 2011) "realistic teacher education" or the core practices approach (Fraefel, 2020, Grossman, 2021), it makes sense

to shift the focus away from the research-practice gap towards the integration of teacher thinking, acting, and becoming. This perspective emphasizes how theoretical knowledge gradually becomes professional expertise through experience, feedback, and reflection.

Swiss teacher training institutions already offer much in this regard. At the same time, they are faced with the difficulty of condensing complex professional preparation into a relatively short period of time. Teacher learning, however, is personal and cannot be rushed. Outcomes are, to some extent, inherently unpredictable and may not always align with institutional expectations. In times when referential frameworks shape our understanding of what it means to "become" a teacher, this may be an uncomfortable, yet important, recognition: professional agency cannot be engineered to a deadline. This highlights the need for sustained, evidence-informed reflection well beyond initial training, supported through mentorship, coaching, and peer collaboration. In this light, "life-long learning" is not just an aspirational phrase, but a structural necessity.

"It makes sense to shift the focus away from the research-practice gap towards the integration of teacher thinking, acting, and becoming."

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