



A systems approach to understanding novice teachers' experiences and professional learning

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Abstract

The seeming disconnect between what novice teachers learn at university and what their first year of teaching demands has been described and lamented for decades. Researchers, teachers, and school managers often blame teacher education programmes for not preparing novice teachers for the realities of school. However, blaming student teachers' initial teacher education (ITE) programme is reductionist and ignores that this is only one of the complex systems that shape their practice. I argue that a more productive way to understand novice teachers' experiences is through a systems approach that engages with four nested systems that shape their practice—the system of the teacher (that encompasses their personal and professional identities and their knowledge and competences), the classroom system, the school system and the macro-educational system. In this paper, I present interview data generated from 30 novice teachers after they had been teaching for 18 months. The data shows that many challenges faced cannot be addressed by the ITE curriculum because they are grounded in other sub systems. I engage with what ITE programmes can do and suggest that the main influence of ITE is in developing student teachers' ethical commitment, professional identity, competences, and professional knowledge and in providing practical teaching experiences in different schools. I also highlight what aspects need to be addressed by the macro levels of the schooling system.

Keywords: teacher education; complexity theory, novice teachers, beginning teachers

Introduction

The experiences of novice teachers' *reality shock* when they start teaching is well-documented around the world. In South Africa, the challenges of novice teachers are heightened by the bifurcated schooling system that has unequally resourced schools, and poor learner achievement. Blame is often placed on initial teacher education (ITE) programmes for not preparing teachers well enough to enable them to be resilient in their first years of teaching. In contrast, in this paper I argue that a systems perspective based on complexity theory provides a more nuanced account of the factors that influence the work and practices

of novice teachers. It also enables us to see more clearly how different system levels can respond to the challenges.

While there certainly are aspects that ITE can do better, the combined effects of poorly resourced schools, weak parental support of learning, poor co-ordination between and among the many layers of education bureaucracy, external regulation of policies, and dysfunctional school management have made teachers' work very difficult (Morrow, 2007; Shalem & Hoadley, 2009; Soudien, 2007). The state's response to poor learner achievement has been to increase teacher accountability by demanding stronger pacing, regulating curriculum coverage, and standardizing assessment practices (Bertram et al., 2021; Shalem & Hoadley, 2009; Spaul, 2015). From this perspective, the teacher is seen as the key lever in achieving better learner achievement.

However, Allais et al. (2019) have argued that it is the high levels of poverty that sustain and reinforce unequal learner achievement in the schooling system. From this perspective, the structural constraints of the education system and a grossly unequal society cannot be easily overcome by the agency of the individual teacher, or even a group of teachers, no matter how knowledgeable, well-prepared, and committed they are. This is the age-old question of structure and agency that highlights the question of what novice teachers can do in schooling structures that often constrain more than they enable. The focus here is how initial teacher education can compensate for the unequal and often dysfunctional schooling system and enable novice teachers to be more resilient in their first years of teaching.

The Initial Teacher Education Research Project (ITERP) conducted case studies of five ITE institutions between 2012 and 2015 with the aim of better understanding how education faculties were preparing student teachers, particularly maths and literacy teachers in the Intermediate Phase (see Bowie & Reed, 2016) and how novice teachers experienced their first school placements (Deacon, 2016a). As part of the large-scale ITERP study, 30 newly qualified Intermediate Phase/Senior Phase teachers were invited to participate in the three-day symposium held in Johannesburg in July 2015. Here, I analyse their reported experiences and perspectives after they had been teaching for 18 months.

The ITERP case studies were conducted at a time when teacher education policy was governed by the Norms and Standards (Department of Education, 2000) and the institutions were in the process of re-designing their curricula to meet the requirements of the Minimum Requirements for Teacher Education Qualifications (MRTEQ) (Department of Higher Education and Training, 2015). This policy signaled a shift from a competence-based curriculum to a knowledge-based one for ITE (Rusznyak, 2015). Thus, the data cannot make claims for current teacher education curricula.

This paper is not a summary of the findings that are reported by Deacon (2016b). Rather, I analyse the data to examine how the work and practices of these newly qualified teachers are shaped by the state at the macro level (external regulation), the school system and the classroom system (internal regulation), and by the teacher system (their own values personal qualities, and beliefs about teaching as well as their competences and knowledge that have

been shaped in part by their ITE). I then engage with the question, “How can teacher education prepare novice teachers better for teaching when many of the challenges they will face are located in spheres that are outside the influence of the teacher education curriculum?”

Studies on the experiences of novice teachers

There are many studies that show that novice teachers feel unprepared for their first years of teaching and the consequent *reality shock* of being in schools is well documented around the world (Avalos, 2016; Caspersen & Raaen, 2014; Strom et al., 2018). Some of the findings from studies show that novice teachers find the administration and marking tasks overwhelming, they underestimate the varied and incessant demands on their time, they find it difficult or impossible to apply the teaching strategies learned at university, they find classroom management difficult, and they experience the power relationships and micro-politics of the school as challenging.

The data from South African studies on beginning teachers show similar findings as Botha and Rens (2018) have pointed out. A study by Arends and Phurutse (2009) collected quantitative data from 530 novice teachers in five provinces, namely Gauteng, Mpumalanga, Free State, KwaZulu-Natal, and Western Cape that were selected since they have the highest number of beginner teachers who are in their first four years of teaching. There was also a qualitative element to this study since they visited four or five schools in each province and interviewed the principals and beginner teachers. The main findings of this study showed that the biggest challenge faced related to discipline and classroom management. Most of the beginner teacher respondents found the practical component rather than educational or assessment theory of their ITE most beneficial. The respondents noted that there was very little school-based support provided for beginner teachers. Participants expressed high levels of confidence regarding the quality of their teaching practice. This seems to be at odds with the general learner achievement data but there is some evidence (see Armstrong, 2015) from the 2007 Southern and East African Consortium for Monitoring Educational Quality data that learners who were taught by younger teachers (aged 19–29 years) achieved better than learners taught by older teachers.

In a study conducted for the Gauteng Education Department, Henning and Gravett (2012) collected data from 71 questionnaires completed by school principals and from 38 interviews conducted with school principals, teachers, Heads of Departments, and district officials. Some of the key findings show that a quarter of the new teachers surveyed were allocated to teach in a phase for which they had not been trained. B.Ed students said that they were more confident about the acquisition of skills than did the Postgraduate Certificate in Education (PGCE) students. Close to two thirds (59%) of participants said that they were partnered with an experienced mentor in their first year of teaching; this means that 41% of the new teachers had no mentoring.

A qualitative study of 10 Foundation Phase teachers in Gauteng (Petersen, 2017) also showed that the novices struggled to settle into the practice of managing a school classroom and blame, largely, the inadequacy of their teacher education programmes. Many of these novice teachers were overwhelmed by the immense expectations of monitoring and tracking learners' progress using many different assessment tasks and were daunted by the minimal mentoring support they received and by the power dynamics in the classroom, along with the difficulty of actually using in their classrooms the teaching methods that they were taught at university. Petersen (2017) argued that novice teachers are in a stage of liminality and require good support and mentoring from senior teachers as they traverse their rite of passage towards emerging as professional teachers.

These studies show that the novice teachers experienced challenges with classroom management and discipline (see Arends and Phurutse 2009; Petersen, 2017), and many did not experience consistent and sufficient school-based support through mentoring (see Arends and Phurutse 2009; Henning and Gravett 2012; Petersen, 2017). This is supported by a survey of 56 PGCE students who graduated in 2018, of whom only a third said that they were formally allocated a mentor in their first year of teaching (Ncayiyana, 2022). In addition, novice teachers reported that they struggled with the fast pace of the official curriculum, and experienced as overwhelming the load of administrative and assessment tasks they were given.

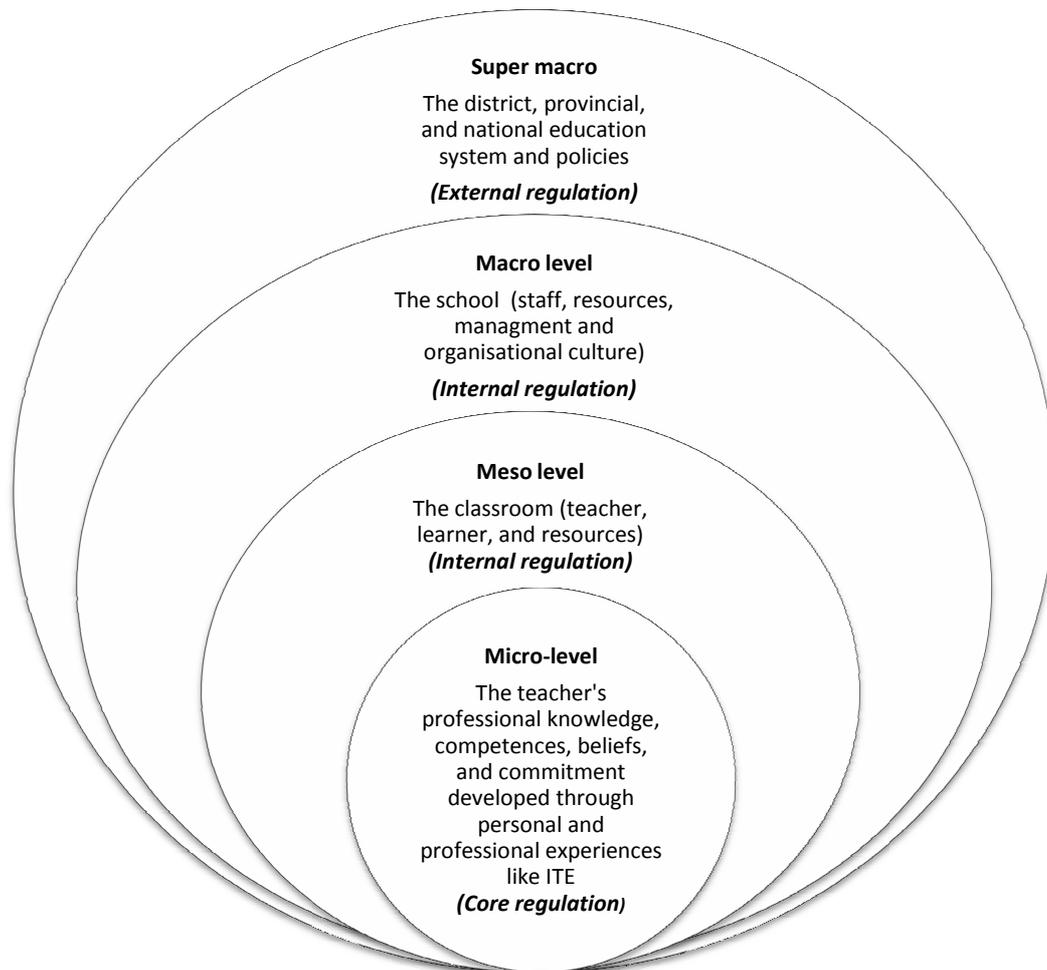
A systems framework to locate novice teachers' work

I have generated a conceptual framework that maps the various system levels that give rise to the experiences and challenges faced by novice teachers. The purpose is to move beyond a dominant linear explanation that tends to blame ITE for poorly preparing students to face the rigours of school life. I draw on work by Hoadley (2002) and by Strom et al. (2018) on the regulation of teachers' work and on Strom & Viesca (2021) on complexity theory to create a conceptual framework from which to analyse the data.

Strom et al. (2018) drew on the work of complexity theorists to consider first year teaching practices as part of a complex set of systems that include, but go beyond, the nature of the ITE programme and of the teacher as autonomous actor. They argued that complexity theory enables researchers to understand "novice practices as arising from interactions occurring between the teacher and other elements within a larger network" (p. 3). Complexity theory understands the systems as nested: the teachers and learners are nested within the classroom, which is nested within the school, which is nested within the school district and the national policy frameworks (see figure 1). The boundaries between and among these subsystems are porous and overlapping rather than solid and fixed (Davis & Sumara, 2006) but they provide a useful heuristic with which to analyse the data.

Figure 1

System levels that influence and shape teachers' practice and professional identity (adapted from Hoadley, 2002 and Strom et al., 2018).



The micro-level system is comprised of the novice teacher. They bring their personal and professional experiences and identity, beliefs, commitment, knowledge, and skills (professional judgement) to inform their teaching practices. The classroom that serves as the immediate environment for their practice represents the meso-level system. This classroom system includes the teacher, the learners, and the available resources. The classroom is, of course, nested in the school where the teacher works. The school system includes the school management team, administrators, other teachers, mentors, and parents with whom they interact as well as the overall school culture and organisational structures. This perspective is supported by Flores and Day (2006) who argued that school context and particularly the organisational culture of a school has a big influence of the practices of novice teachers. This is what the macro-level system is comprised of. At the super-macro level is the larger educational system that includes district, provincial, and national policies that filter through the subsystems nested within it (and the staff who work at these levels) to shape first-year teaching practices and experiences. These policies are themselves informed by historical processes and compromises (Sayed, 2016).

While Strom et al. (2018) focused on the sub-systems that specifically shape the practices of *novice* teachers, Hoadley (2002) argued that the work and identity of *any* teacher is regulated at the three levels of state, school, and teacher). These three levels can be plotted onto the levels suggested by Strom et al. (2018). Hoadley (2002) reviewed the literature aimed at understanding how teachers defined who they were and what they did as teachers. She argued that teachers' work is regulated externally by the state's specific education project in that a teacher has a pact with the state to fulfil the state's policy requirements. Teachers' work is also regulated at the school level; Hoadley calls this internal regulation. This refers to how the school is organised and managed since these institutional cultures and material resources constrain or enable certain ways (for example, collaborative practices) of being a teacher. The third level of regulation is core regulation that refers to the teacher in relation to values about the purposes of education, motivation, commitment, their professional knowledge base and notions of acceptable professional practice developed through ITE, and their beliefs about their ability to enact agency. At this level the rewards of teaching are psychic or intrinsic (see Lortie, 1975) and the teacher's work is influenced by their own internal accountability.

Methodology

The five universities who participated in the ITERP study provided details of all B.Ed. students who specialised in the Intermediate Phase (IP) and/or Senior Phase (SP) and had graduated in 2013 (Deacon, 2016b). These 357 teachers were contacted telephonically and 55 agreed to attend the symposium held in Johannesburg in July 2015. Ultimately only 30 arrived because of logistical issues. Participants had been teaching in schools for 18 months when the data was generated through one-on-one interviews and through focus group interviews whose participants were grouped according to the five ITE institutions that they attended) that were conducted by a range of experienced field workers using the same structured interview schedule. The questions focused on what participants would change about their ITE programmes, what they would not change, and what kinds of challenges they faced as novice teacher. The participants self-selected so their views cannot be said to represent a larger sample of IP/SP graduates from even the five institutions that were represented. While data was collected in 2015, it would be safe to surmise that the resources, organisation of schools, mentoring support, and state policy requirements have not changed much since then. However, the ITE curriculum experienced by currently enrolled students will have changed to a more knowledge-focused one given the requirements of the new MRTEQ policy (Department of Higher Education and Training, 2015).

Of the 30 participants, 16 were teaching in fee-paying schools (Quintile 4 or 5) and 14 in no-fee schools (Quintiles 1, 2, or 3). Thus at least half of these respondents were teaching in fairly well-resourced schools in South Africa; this is not surprising given that eighteen of them were teaching in the Western Cape and Gauteng, both of which have a high percentage of Quintile 4 and 5 schools.

Findings

In this section, I organise the interview data according to the four sub-systems described by Strom et al. (2018) in order to provide insight into how the factors that have an impact on novice teachers' experiences are located at different system levels. I note, too, how this then has implications for the role of ITE programmes.

Super macro level: The education system at national level

At the super macro level, the national curriculum policy, the Curriculum and Assessment Policy Statements (CAPS), is strongly regulated and there are Annual Teaching Plans that teachers need to follow every day. With regard to how the state's regulative frameworks influenced their work as newly qualified teachers, several respondents noted that the pacing required by CAPS was challenging. They said that this fast pacing constrained their desire to teach for learners' understanding. The challenge to meet the CAPS requirements was exacerbated by the slowness of some learners to grasp concepts. In order to meet the pacing of CAPS, teachers said that they had to be constantly moving on, even though some learners had not yet mastered the concepts; in turn this meant that teachers in subsequent grades often had to try to teach what should already have been learnt (Deacon, 2016b). In other words, many of the novice teachers stated that there was a tension between their desire to ensure that the learners had properly understood a concept, and the strong external regulation in the form of the monitoring of CAPS coverage. As two participants noted,

Time constraints are a major factor, yet what is more important is that the learners need to grasp the concept. It is important for the learner to know and apply what they have learned because application is a skill.

. . . teachers [should] make sure that the learners can apply what they have been taught; it is not useful to rush through the curriculum while learners don't understand and they can't apply that knowledge.

The fast pacing is at odds with the reality of learners who were in the novice teachers' classrooms. The curriculum implicitly assumes an ideal learner who is able to keep pace with the curriculum requirements, while the actual learner is not able to do so. This is clearly shown by data on learners' ability to read for meaning (see Howie et al., 2017; Spaul, 2016). A participant said,

The Department requires that you cover a range of methods/approaches to problem solving but there is too little time. The learners are slow and to cover all the CAPS content is highly pressurised.

And another explained,

The CAPS policy doesn't enable us to teach—it tries to monitor, and teachers no longer have any autonomy, our professionalism has been stripped from us, we are micro-managed. The size of the class, and the fact they [learners] come to grade 4 and can't read and write—it's not possible to be this ideal teacher. A lot of learning happens in the home in your own language. The kids in my school are not exposed to language, they don't have the conceptual frameworks that they need to learn new things at school.

Four participants said that the requirement to complete the CAPS curriculum for each year prevented them from planning lessons that differentiated strong from weak learners. One commented, "Learners come with so many gaps it does not matter what method you use as you can't build. There is no time to consolidate so when do you fill gaps?"

Two respondents who were teaching English noted that the CAPS document makes demands that are impossible to meet, particularly with regard to the language assessment tasks. They said,

We struggle with the workload. We are required to do ten formal tasks per term [that leaves] no space in the two-week cycle for lesson preparation and preparation of resources.

CAPS is very extensive [and] there is not enough time to focus on each of the four components [reading and phonics, writing, listening and speaking, and handwriting].

One novice teacher said that while she had been trained to use a text-based approach to promote whole language development, this was not always feasible because

CAPS wants us to teach one language skill (e.g. reading or writing) separately. The Department workbook doesn't allow us to do everything all together—we are required to ensure that children complete four entries per week in the Department workbook, so we can't always use a text-based approach.

A novice teacher in a Cape Town school (where half the children in her class were part of the school nutrition programme) said she was not able to be an "ideal" teacher because of the onerous assessment demands. As she put it,

An ideal teacher spends her time on teaching. But I just do management, 35 assessments, 40 kids in my class times 6 subjects, the CAPS policy says books must be marked daily. I was teaching to assess, and just managing the assessment. For example, if CAPS said it was diary writing, then I would teach them to write a diary entry, and then had to assess that entry. . . The size of the class, and the fact they come to grade 4 and can't read and write—it's not possible to be this ideal teacher.

Thus, the data shows that the curriculum and assessment policies and administrative workloads both shaped the participants' teaching practices and prevented them from teaching

in a differentiated way to meet learners' needs and use the teaching strategies they had been trained to use, such as a text-based approach to literacy.

A participant who was teaching at the Further Education and Training (FET) phase in a rural school found herself teaching boys aged 18 to 20 in her Grade 8 and 9 classes. She noted that the age of the children in her class caused huge problems with both discipline and motivation since these learners knew that their promotion to the next grade would be condoned. This is a result of the promotions policy that allows a learner to fail only one grade per schooling phase.

Macro level: The school

At the school level, the organisational culture, management practices, and resourcing of the school in which a teacher works, shape the practices of novice teachers. There are vast differences between schools depending on their Department of Education affiliation pre-1994, and their geographical location (suburban, township, or rural) in relation to resourcing, school organisational culture, and the socioeconomic status and cultural capital of the learners' parents (Chisholm et al., 2005; Soudien, 2007). The participants noted several school-level aspects that shaped their teaching: the allocation of teachers to teach phases/subjects in which they had not specialised; the presence or lack of induction and mentoring; and the organisational culture and management of the school.

Teaching out of phase

One of the key aspects that shapes the practices of novice teachers is their confidence and competence to teach the class to which they are assigned. Arguably, confidence and competence are strongly linked to the knowledge acquired during their ITE studies. In this study, six novice teachers were teaching entirely outside of their phase specialisation, three each in the Foundation and in FET. This made up 20% of the sample; this is similar to Henning and Gravett's (2012) finding that 26% of their sample was teaching out of the phase for which they were qualified. Ncayiyana's (2022) study of PGCE graduates from the University of KwaZulu-Natal indicated that 30% were teaching subjects for which they were not qualified. However, the ITERP survey of 776 novice teachers in their first year of teaching in 2014, showed that a much higher percentage, namely 65% of newly qualified IP teachers were teaching out of phase (Deacon, 2015).

A teacher commented on how teaching out of phase impacts on her work when she said,

I teach Foundation Phase learners, [and] I sometimes feel like I am failing the learners because I was not trained to teach Grades 1 to 3, so I have to adjust to their level with whatever knowledge I found at [university].

Another noted, "I had been looking forward to using my [first years' worth of] experience to improve the way I taught maths to Grade 6 [but] the school said, 'You're a primary school teacher and must be able to teach all subjects,' and allocated her to teach social science and creative arts in her second year instead of maths.

It is often the case that novice teachers are not deployed to teach subjects for which they are qualified. The ITERP survey showed that 43% of all newly qualified English specialists were not teaching English and 28% of all newly qualified mathematics specialists were not teaching mathematics (Deacon, 2015). In this study, 16 participants had specialised in teaching IP English during their university studies but only eight were currently doing so, seven were teaching English in another phase, and one was not teaching English at all. Of these novice teachers, regardless of whether they had specialised in the subject, 25 were teaching English in one or another phase (Deacon, 2016) whether or not they had the knowledge and pedagogic content knowledge (PCK) to do this.

Induction and mentoring at school

Only half (15) of the participants indicated that they were inducted into their school (that is, provided with an orientation to the school buildings, policies and procedures, and introduced to their colleagues). Of these, nine were inducted by the principal of the school, with the remainder being inducted by a Head of Department or another senior teacher. Of the 19 being mentored, 10 had also been inducted. This means that 11 of these particular participants received no mentoring or induction support in their school and this also clearly shaped their experience.

The overwhelming nature of school administration is a common finding in studies on beginning teachers. With regard to the kinds of assistance that respondents had asked for, the largest single proportion (22) had sought help with administrative tasks and responsibilities. Similar numbers had requested assistance with subject planning, setting assessment tasks, managing learners' behaviour, and dealing with parents. Of these respondents, 12 stated that they had been partly or completely unprepared for the various kinds and quantities of administrative tasks that they as teachers were required to undertake. These tasks included preparing and taking registers, creating and maintaining a whole range of files, managing the distribution of learning and teaching support materials, developing and using various assessment rubrics, diagnostics and moderations, writing reports, and completing the Integrated Quality Management System (IQMS) and various other forms required either by the school or by the province, as well as entering data into the Centralised Educational Management Information System (CEMIS) and the School Administration and Management System (SA-SAMS).

That the novice teachers were mostly seeking help on the administrative aspects of teachers' work indicates that this core contextual knowledge is essential when one is starting out as a teacher. It seems that these novice teachers needed an understanding of these urgent requirements before they could focus on the substantive aspects of teaching such as planning worthwhile lessons and learning activities, preparing high quality assessments, and thinking deeply about how to make conceptual connections between and within topics.

School organisational culture and management

A number of studies show how school culture impacts on teachers' work and professional learning (Flores & Day, 2006). Schools that are most successful at retaining beginning teachers are highly collaborative, value the knowledge of all teachers (including beginning teachers), and focus on what is most educative and worthwhile for students (Long et al., 2012; Wynn et al., 2007).

Many of the respondents expressed concern about the organisational culture and management in their school. Of the novice teachers, nine wished that their schools had more consistent, more systematic, and better communicated school management and discipline practices. Many felt that some school management decisions (particularly those related to appointments, timetables, and workloads) seemed to favour vested interests, foster inequalities between teachers based on gender, race, age, or even the institution where they had studied, or were just poorly thought through. There were two negative references to staffroom politics and four to some principals and school management teams being so autocratic, rigid and unsupportive that "even the unions and the Department of Education can't help you." One novice teacher objected to being treated by other teachers as, in her words, "a minor"; another said she was bullied by the older teachers into "taking their lessons even if it is not my class or teaching period" and into "marking their work if they are absent." A third, as the youngest staff member in a school said, "There is no communication between members of the staff. I don't speak to anyone." This novice teacher clearly felt that the school management and organisation had a detrimental effect on her ability to teach. She went on to say,

The [ITE] course can train us to teach maths, but no course can train us to cope with poor school management and the problems we experience with the way schools are run . . . In a good environment we'd be thriving as maths teachers.

With regard to the attitudes of their fellow teachers, several novice teachers expressed a level of disquiet. Of these, 12 said that they sometimes felt pressurised by other teachers not to give of their best in their teaching. Their comments included, "I expected there would be more working together for a common goal." Of these, two were "surprised by the varying work ethic of the teachers" and two agreed that "some teachers didn't seem to care about their teaching" with some teachers deemed to be "just doing the minimum" or, according to another two, even acting unprofessionally.

It was clear that the novice teachers had developed a level of motivation and commitment from their ITE studies to teach all learners and had assumed pedagogic responsibility for enabling learning. They were concerned that many of their colleagues did not share the same commitment. A participant teaching Grade 4 in a Cape Town school said,

I wasn't expecting for teachers to be so apathetic about the kids, about the kids' progress. They complained about the parents all the time. I thought I would run programmes with the parents but the other teachers said, 'Don't be silly.' If the child

struggles, the teachers in the school don't see it as their problem, it's the child's problem, or the system, you just make them pass the grade.

Meso level: The classroom

While a teacher has some autonomy over her practices in her own classroom, her teaching practices are strongly influenced by the nature of the learners in the classroom (Strom et al., 2018). In addition, the classroom environment that includes the available resources, the number and placement of desks, and the number of children also enables and/or constrains practices. While two thirds of the teachers said that there were generally enough learning materials, such as textbooks, available for their learners, most noted that they experienced challenges with regard to the learners' level of knowledge and proficiency in the Language of Learning and Teaching (LOLT) that is typically English or Afrikaans from Grade 4. On the whole, the novice teachers felt that they were not prepared to teach English to learners who were unable to speak or read the language after having completed Grade 3. The Intermediate Phase curriculum is premised on the assumption that children have learnt to read by the end of Grade 3, and from Grade 4 are able to read to learn, but this is most often not the case in South Africa (Spaull, 2022).

Over a third of these novice teachers noted that their learners struggled with speaking and understanding LOLT. Several respondents noted that "language is a huge problem." They said that many learners "struggle with answering comprehension questions because they don't have good basic English understanding and learning." One graduate currently teaches English as first additional language at a school in a deep rural area in KwaZulu-Natal where, she said, learners "never speak English outside the school" and were also taught all their other subjects in isiZulu. She added, "Learners have no competence in English, they cannot speak or read or construct a basic sentence in English." Another respondent found not only that "many children don't like to read," but they also did not want to read in English as their first additional language. She said, "They are scared and they don't want to try, and don't practise English at home."

This challenge was echoed in various ways across the focus groups when participants were asked what they wished they had learned in their B.Ed programme. The respondents replied that they wished they knew "how to teach learners who don't understand English at all" and "how to teach learners to read" along with "how to teach Grade 6 and 7 learners who simply do not know how to read or write." One of the respondents teaching in a rural school noted,

They didn't tell me that I would find a learner in Grade 12 who cannot read. With a syllabus to finish, I have no time to help the learner to read from scratch. There is nothing much I can do for them.

Of the participants, 16 said that their learners took time to grasp concepts and that the learners could not yet comprehend what they read, with 13 indicating that many of the learners in their classes experienced challenging home circumstances. For eight respondents, most of the learners were in this position while 18 said that at least some of their learners had

short attention spans or emotional/psychological problems and 15 had learners who were not yet able to write sentences on their own.

A teacher from a no-fee school in Mitchell's Plain (Western Cape) noted,

What I didn't see coming was the learners, their weak learning level was a shock. Teaching Practice is not a fair reflection of what really happens in class, as you just teach isolated lessons.

Micro level

At the micro level, teachers' practice is shaped by their values, beliefs, knowledge (including knowledge of the learner, subject content knowledge, and PCK,) as well as how they understand their responsibility as teachers and their professional identity that is based on what they think professional practice is. Asked to describe how they imagined an ideal teacher, 21 (over two-thirds) of the interviewees mentioned the term knowledge, which included reference to subject content knowledge as well as to general knowledge and to being knowledgeable, learned, or well-studied. The teacher as a role model, someone for learners to look up to and be inspired by, was mentioned by a third of the participants, while almost as many emphasised that the ideal teacher is organised, structured, and one who plans well and has good time management. Of these novice teachers, five thought that it was not possible to be like their ideal teacher in their context that included, for some, large class sizes, overly prescriptive curricula (referring to CAPS), school micromanagement, unhelpful colleagues, and having to teach subjects or in phases for which they had not been trained.

A novice teacher from a Cape Town school said he could not be an ideal teacher because a primary school teacher was expected to have such a wide range of knowledge. He explained,

I think if I taught only one or two subjects, I would be able to do that. Teaching all the subjects, it's just unrealistic, very difficult to have this knowledge. I think there should be more subject teaching in the primary school. . . I find it overwhelming. I think I am failing the kids. That is my biggest fear. As a professional, I am trying to master my career. I want to be good expert teacher.

An overwhelming majority (27) said that they were pleased they were teaching, thus indicating that they were not experiencing the low morale sometimes felt by more experienced teachers. Over two-thirds (22) felt motivated to stay in the teaching profession for the foreseeable future. Their expectations of being a professional teacher show that principled conduct, or ethical action, defined the professional teacher, in conjunction with being knowledgeable and prepared. It was clear that the respondents wanted to teach in such a way that their learners understood concepts and were able to apply these concepts. For them, it was not enough to just cover the curriculum.

Discussion

I now engage with the question of what teacher education can do to compensate for the *reality shock* faced by novice teachers. This is a universal experience, but is exacerbated by the huge schooling inequalities and learners' weak literacy and numeracy levels in South Africa. I make three key arguments: first, that teacher education can influence teachers' core regulation most directly and specifically. This can be done through the curriculum that must prepare student teachers for the reality that many South African children are reading, writing, and calculating at three or four grade levels below their actual grade (Schollar, 2018). I also suggest a stronger focus on designing and grading worthwhile assessment tasks, and on teachers' agency and professional judgment in the face of policy requirements. ITE can play a role in preparing and supporting student teachers for varied classroom realities by ensuring that they do teaching practice (work-integrated learning) in a range of schools. Second, while teacher educators cannot engage directly with school-level (meso) and broader issues concerning the external regulation of teachers' work, they can raise the vital agenda of good school mentoring in national policy platforms and work to create good school-university partnerships through providing a wide range of teaching practicum experiences to student teachers. My third argument is that the two key issues that impact on novice teachers' experiences—teaching outside of their specialisation and the strong pacing of the official curriculum—must be engaged with at provincial and national department levels.

Regarding the first argument of how ITE can impact on the core regulation of novice teachers' work at the micro level, it appears that the five ITE institutions where the respondents were qualified have been successful in instilling a sense of teacher professionalism in these students that includes a commitment to principles of teaching for understanding, of supporting all learners, and recognising the importance of having deep subject knowledge. They were obviously keen to make a difference in the lives of their learners and were frustrated by the teachers in their schools who had given up and were apathetic. It seems that these novice teachers clearly understood their role as necessarily being knowledgeable, preparing well, and focusing on teaching. Clearly, they were embracing the formal elements of teachers' work, "the organisation of systematic learning" (Morrow, 2007, p. 14).

The incorrect assumption behind CAPS and teacher education curricula is that learners have learned to read in the FP and that they are able to learn in English as LOLT in Grade 4. At least half of the novice teachers in this study noted that their learners were not able to comprehend what they read in English and thus could not learn independently from any text. Additionally, many of the respondents noted that they had neither knowledge nor strategies for how to teach children to read. This makes sense since they were trained as intermediate or senior phase teachers. They also did not have time to do so if the learner was already in an advanced grade. The reality of learners' literacy levels contributed to the *reality shock* of being a novice teacher.

As mentioned above, there is now overwhelming data that indicates that the majority of South African learners do not learn to read with meaning by Grade 4 and thus cannot read to learn in later grades (Howie et al., 2017; Spaul, 2022; van der Berg & Gustafsson, 2019). This reality must inform the teacher education curriculum. All primary school teachers (not only FP teachers) need both theoretical and pedagogical knowledge so that they are able to teach children to read so that they know how to decode and make meaning from a text. If we do not make this a priority, newly qualified teachers will not be able to address the literacy crisis in South African schools and will continue to experience a massive chasm between their expectations of their primary school learners and the reality. Taylor (2016) suggested that in the next ten years, teacher educators commit themselves to developing effective literacy and numeracy programmes for initial teacher education. This work has been started by the Primary Teacher Education Project (PrimTEd) programme, which ran from 2016 to 2020.¹ There are now Knowledge and Practice Standards for Primary Teacher Education Graduates: Language and Literacy (PrimTEd Literacy Working Group, n.d.) which provides guidelines regarding what all primary school teachers should know and be able to do with regard to teaching learners to read and write.

Regarding the internal regulation at the meso school level, the school culture and management at school level obviously regulates novice teachers' work in vital ways that cannot be addressed directly by initial teacher education. The distribution of well-qualified teachers is uneven across schools given the bi-furcated education system as Hoffman et al. (2016) have noted. Fee-paying schools tend to have better-qualified teachers whose organisational assets bring better mentoring possibilities for novice teachers as well as a reservoir of specialised knowledge, skills, and dispositions (Chisholm et al., 2005; Sayed, 2016; Shalem & Hoadley, 2009). So, the experience of novice teachers who start teaching in Quintile 4 and 5 schools is most likely to be different from those who start teaching in Quintile 1 and 2 schools. Teachers who teach in fee-paying schools are more likely to teach learners who are cognitively better prepared for schooling, have homes that function as a second site of acquisition, and have a school management team that mediates the bureaucratic demands of accountability (Shalem & Hoadley, 2009). These inequalities cannot be addressed by ITE, but ITE programmes can make this reality more explicit to their students.

One way to do this is to ensure that all student teachers do work-integrated learning in a range of different schools, followed by structured, well-mediated reflections on their experiences of the mentoring, school organisation, and management culture, and how this supported or hindered their professional learning in that school. Student teachers also need to understand the policies and histories that inform the reality of the bi-modal schooling system, understand the sociological and social justice implications of this, and engage with how they can take agency in the light of these realities. ITE curriculum must teach student teachers about the importance of professional judgement and agency, not only as an individual act but as a response from a professional community (see for example, Long et al., 2017).

1 <https://www.jet.org.za/clearinghouse/projects/printed/about>

Teacher educators can engage with school-level factors through partnerships with schools regarding the mentoring of student and novice teachers. South African studies on novice teachers indicate that in-school mentoring is provided to only about 50 to 60% of the novice teachers (Arends & Phurutse, 2009; Deacon, 2016b; Henning & Gravett, 2012; Petersen, 2017). This is a huge gap since proper mentoring and supportive learning communities is a vital way of supporting novice teachers through the shock of teaching in schools (Wynn et al., 2007). The respondents in this study wanted support regarding preparing and taking registers, creating and maintaining the required range of files, managing the distribution of textbooks and workbooks, developing and using various assessment rubrics, diagnostics, and moderations, writing reports, and completing IQMS and various other forms required either by the school, the district or by the province, as well as entering data into CEMIS and SA-SAMS. Many of these administrative and record-keeping tasks (data-base records, completing forms and registers, managing textbook stock) are context-specific and technical. It is not the place of initial teacher education to train teachers to do these tasks since they require an understanding of a specific school context. School or district managers must undertake to systematically explain these requirements to novice teachers.

However, it is not enough for mentoring to be focused only on administrative and technical tasks and procedural policies in schools. Mentors should be supporting novice teachers in lesson planning, choosing appropriate resources and activities, designing worthwhile assessment tasks, and helping them to see the pedagogic reasoning that lies behind the choices that teachers make every day (Rusznyak & Bertram, 2021). The Department of Basic Education's desire to encourage mentoring is reflected in two recent documents about being a mentor (Department of Basic Education, 2019a, 2019b). This is a good start, but it does appear that these documents focus on the organisational and planning aspect of the process, with little emphasis on the substantive aspects of the mentoring relationship.

With regard to assessment, ITE curricula need to ensure that student teachers acquire PCK and content knowledge so that they can make judgements about the key conceptual relationships that are worth assessing in a particular subject (Winch, 2017). They need to learn how to design valid and reliable tests and meaningful assessment tasks, how to mark these, and how to provide worthwhile feedback to learners. There is growing research that highlights the importance of formative feedback as a mechanism to support learning (see Hattie & Timperley, 2007). There is a national initiative that focuses on assessment for learning for teachers (Department of Basic Education, 2020) and it makes sense for ITE programmes to also work on this area.

Two major challenges raised in this study are that novice teachers are being allocated to teach outside of the phase and specialisation for which they were educated and that the official curriculum is so rapidly paced. My final argument is that the first needs attention from district officials and principals, and the second from the national Department of Basic Education. There appears to be a belief among many school managers that a primary teacher should be a generalist and should be able to teach in any phase or discipline. This does not dovetail with the ITE curriculum that carefully makes distinctions between phase and specialisation. One

way out of this dilemma is that TE institutions shift their specialist stance and require that all primary school teachers should specialise in both mathematics and English, since it is likely they will all be required to teach in both these subject areas. The other option is that primary schools change their generalist stance, and employ, for example, two or three specialist teachers to teach all the maths classes within a phase, rather than expecting every class teacher to be an effective maths teacher.

At the level of external regulation by state policies, many participants in this study felt that they were not able to teach for conceptual understanding because the strongly regulated curriculum does not allow sufficient time for learners to grasp the concepts. For some, this created a clash with their core regulation since their professional judgement was to ensure that all learners had grasped the key concepts, but there was not sufficient time to do so. There is growing evidence that many teachers experience this tension (Bertram et al., 2021). We are faced with the conundrum between the need for a more structured curriculum and more thorough curriculum coverage on the one hand and the teachers' experience that the curriculum pacing is too fast for many of their learners, on the other. Teaching learners who do not have the knowledge and competences required for their grade level is probably one of the biggest challenges faced by teachers. It needs more robust engagement since external regulation and monitoring of coverage and pacing can simply create a culture of compliance by teachers and fail to support meaningful learning.

Conclusion

In response to the blame often placed on ITE for not preparing novice teachers for the *reality shock* of starting to teach, I have teased out the various levels of the system that impact on the work and practices of beginning teachers and have suggested which actors are able to influence these different sub-systems. It is clear that ITE curricula must do more to ensure that novice teachers have the content knowledge and PCK to teach the learners that are in their classrooms, with the understanding that PCK takes many years to “come to fruition” (Winch, 2017, p. 89). However, the school organisational culture and management decisions, particularly regarding supportive mentoring, collegial learning communities, and subject/class allocations, has a huge impact on the work of novice teachers. Similarly, the national policies of curriculum and assessment monitoring and administrative reporting impact on teachers' work and their autonomy. Thus, it is clear that ITE alone cannot compensate for the *reality shock* experienced by novice teachers. We need a systemic understanding of the issue that involves teacher educators, school managers, senior teachers, and the Department of Education to interrogate the role they can play in supporting the professional learning of novice teachers.

References

- Allais, S., Cooper, A., & Shalem, Y. (2019). Rupturing or reinforcing inequality? The role of education in South Africa today. *Transformation: Critical Perspectives on Southern Africa*, 101, 105–126.

- Arends, F., & Phurutse, M. (2009). *Beginner teachers in South Africa. School readiness, knowledge and skills*. HSRC Press.
- Armstrong, P. (2015). Teacher characteristics and student performance: An analysis using hierarchical linear modelling. *South African Journal of Childhood Education, 5*, 123–145. http://www.scielo.org.za/scielo.php?script=sci_arttext&pid=S2223-76822015000200007&nrm=iso
- Avalos, B. (2016). Learning from research on beginning teachers. In J. Loughran & M. L. Hamilton (Eds.), *International handbook of teacher education* (pp. 487–521). Springer Science+Business Media. https://doi.org/10.1007/978-981-10-0366-0_13
- Bertram, C., Mthiyane, C. C. N., & Naidoo, J. (2021). The tension between curriculum coverage and quality learning: The experiences of South African teachers. *International Journal of Educational Development, 81*. <https://doi.org/10.1016/j.ijedudev.2021.102353>
- Botha, C. S., & Rens, J. (2018). Are they really ‘ready, willing and able’? Exploring reality shock in beginner teachers in South Africa. *South African Journal of Education, 38*(3). <https://doi.org/10.15700/saje.v38n3a1546>
- Bowie, L., & Reed, Y. (2016). How much of what? An analysis of the espoused and enacted mathematics and English curricula for intermediate phase student teachers at five South African universities. *Perspectives in Education, 34*(1), 102–119. [www.semanticscholar.org > paper > How-much-of-what](http://www.semanticscholar.org/paper/How-much-of-what)
- Caspersen, J., & Raaen, F. D. (2014). Novice teachers and how they cope. *Teachers and Teaching, 20*(2), 189–211. <https://doi.org/10.1080/13540602.2013.848570>
- Chisholm, L., Hoadley, U., wa Kivulu, M., Brookes, H., Prinsloo, C., Kgobe, A., Mosia, D., Narsee, H., & Rule, S. (2005). *Educator workload in South Africa*. Education Labour Relations Council and the HSRC.
- Davis, B. & Sumara, D. (2006). *Complexity and education: inquiries into learning, teaching and research*. Lawrence Erlbaum.
- Deacon, R. (2015). *Newly qualified teachers in South Africa: Report on the 2014 telephonic follow-up survey of the 2013 class of final year initial teacher education students*. <https://www.jet.org.za/clearinghouse/projects/iterp/resources>
- Deacon, R. (2016a). *The initial teacher education research project: Final report*. <https://www.jet.org.za/clearinghouse/projects/iterp/resources>
- Deacon, R. (2016b). *Newly Qualified Intermediate Phase Teachers in South Africa. Final Report on the ITERP NQT Symposium*, <https://www.jet.org.za/clearinghouse/projects/iterp/resources>

- Department of Basic Education. (2019a). *Guide for training mentors*.
<https://southafrica.vvob.org/download/download-dbe-new-teacher-induction-nti-materials-national-induction-framework-mentor>
- Department of Basic Education. (2019b). *A pathway to mentoring*.
<https://southafrica.vvob.org/download/download-dbe-new-teacher-induction-nti-materials-national-induction-framework-mentor>
- Department of Basic Education. (2020). *National assessment circular of 3 2020. Implementation of formative assessment in the General Education and Training (GET) band*. <https://www.education.gov.za/Curriculum/NationalCirculars.aspx>
- Department of Education. (2000). *Norms and Standards for Educators*.
<https://www.gov.za/documents/national-education-policy-act-norms-and-standards-educators>
- Department of Higher Education and Training. (2015). Policy on the minimum requirements for teacher education qualifications, as revised 2014. [www.dhet.gov.za > sites > PolicyRepository](http://www.dhet.gov.za/sites/PolicyRepository)
- Flores, M. A., & Day, C. (2006). Contexts which shape and reshape new teachers' identities: A multi-perspective study. *Teaching and Teacher Education*, 22(2), 219–232.
[www.researchgate.net > publication > 229334712](http://www.researchgate.net/publication/229334712)
- Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, 77(1), 81–112. <https://doi.org/10.3102/003465430298487>
- Henning, E., & Gravett, S. (2012). *Moving beyond the theory practice divide: The professional experiences of beginning teachers*. University of Johannesburg.
- Hoadley, U. (2002). The regulation of teacher work identity: Core considerations. *Journal of Education*, 28, 39–62.
- Hoffman, N., Sayed, Y., & Badroodien, A. (2016). Different rules for different teachers: Teachers' views of professionalism and accountability in a bifurcated education system. *Journal of Education*, 65, 123–153. <http://sro.sussex.ac.uk/id/eprint/78251/>
- Howie, S. J., Combrinck, C., Tshele, M., Roux, K., McLeod Palane, N., & Mokoena, G. M. (2017). *PIRLS 2016 Progress in International Reading Literacy Study 2016 Grade 5 benchmark participation: South African children's reading literacy achievement*. Centre for Evaluation and Assessment.
<https://repository.up.ac.za/handle/2263/65221/restricted-resource?bitstreamId=36b65ee0-6ace-4403-b279-793acf79637c>

- Long, C., Graven, M., Sayed, Y., & Lampen, E. (2017). Enabling and constraining conditions of professional teacher agency: The South African context. *Contemporary Education Dialogue, 14*(1), 1–17. <https://doi.org/10.1177/0973184916678681>
- Long, J. S., McKenzie-Robblee, S., Schaefer, L., Steeves, P., Wnuk, S., Pinnegar, E., & Clandinin, D. J. (2012). Literature review on induction and mentoring related to early career teacher attrition and retention. *Mentoring & Tutoring: Partnership in Learning, 20*(1), 7–26. <https://doi.org/10.1080/13611267.2012.645598>
- Lortie, D. (1975). *Schoolteacher. A sociological study*. University of Chicago Press.
- Mogliacci, R. J., Raanhuis, J., & Howell, C. (2016). Supporting teachers in becoming agents of social cohesion: Professional development in post-apartheid South Africa. *Education as Change, 20*(3), 160–179. <http://dx.doi.org/10.17159/1947-9417/2016/1482>
- Morrow, W. (2007). What is teachers' work? *Journal of Education, 41*, 1–15. https://doi/10.10520/AJA0259479X_20
- Ncayiyana, B. T. (2022). *A mixed method study exploring induction experiences of novice teachers* [Unpublished M.Ed dissertation, University of KwaZulu-Natal, Pietermaritzburg, RSA].
- Petersen, N. (2017). The liminality of new foundation phase teachers: Transitioning from university into the teaching profession. *South African Journal of Education, 37*(2). <https://doi.10.15700/saje.v37n2a1361>
- PrimTEd Literacy Working Group. (n.d.). *Knowledge and practice standards for primary teacher education graduates: Language and literacy*. <https://www.jet.org.za/clearinghouse/projects/primted/standards/literacy-teacher-standards>
- Rusznyak, L. (2015). Knowledge selection in initial teacher education programmes and its implications for curricular coherence. *Journal of Education, 60*, 7–29. <https://doi.org/10.17159/i60a01>
- Rusznyak, L., & Bertram, C. (2021). Conceptualising work-integrated learning to support pre-service teachers' pedagogic reasoning. *Journal of Education, 83*, 34–53. <https://doi.org/> <https://doi.org/10.17159/2520-9868/i83a02>
- Sayed, Y. (2016). The governance of public schooling in South Africa and the middle class: Social solidarity for the public good versus class interest. *Transformation: Critical Perspectives on Southern Africa, 91*, 84–105. <https://sro.sussex.ac.uk/id/eprint/78255/>

- Schollar, E. (2018). Curriculum management, improving learner performance and the rise of multi-grade classes: A tangled web of challenges to the design, operation and evaluation of educational development programmes in South Africa. In P. Christie & M. Monyokolo (Eds.), *Learning about sustainable change in education in South Africa: The Jika iMfundo campaign 2015-2017*. Saide.
- Shalem, Y., & Hoadley, U. (2009). The dual economy of schooling and teacher morale in South Africa. *International Studies in Sociology of Education*, 19(2), 119–134. <https://doi.org/10.1080/09620210903257224>
- Soudien, C. (2007). The “A” factor: Coming to terms with the question of legacy in South African education. *International Journal of Education Development*, 27, 182–193. <https://doi.org/10.1016/j.ijedudev.2006.07.006>
- Spaull, N. (2015). Accountability and capacity in South African education. *Education as Change*, 19(3), 113–142. <https://doi.org/10.1080/16823206.2015.1056199>
- Spaull, N. (2016). *Learning to read and reading to learn*. Research on Socio-Economic Policy, Department of Economics, University of Stellenbosch.
- Spaull, N. (2022). *Background report for the 2030 Reading Panel*. Cape Town. <https://www.readingpanel.co.za/resources>
- Strom, K. J., & Viesca, K. M. (2021). Towards a complex framework of teacher learning-practice. *Professional Development in Education*, 47(2-3), 209–224. <https://doi.org/10.1080/19415257.2020.1827449>
- Strom, K. J., Martin, A. D., & Villegas, A. M. (2018). Clinging to the edge of chaos: The emergence of practice in the first year of teaching. *Teachers College Record*, 120(7), 1–32.
- Taylor, N. (2016). Thinking, language and learning in initial teacher education. *Perspectives in Education*, 34(1), 10–26. <https://hdl.handle.net/10520/EJC190461>
- van der Berg, S., & Gustafsson, M. (2019). Educational outcomes in post-apartheid South Africa: Signs of progress despite great inequality. In N. Spaull & J. D. Jansen (Eds.), *South African schooling: The enigma of inequality. A study of the present situation and future possibilities* (pp. 25–46). Springer.
- Winch, C. (2017). *Teachers' know how. A philosophical investigation*. John Wiley & Sons.
- Wynn, S. R., Wilson Carboni, L., & Patall, E. A. (2007). Beginning teachers' perceptions of mentoring, climate, and leadership: Promoting retention through a learning communities perspective. *Leadership and Policy in Schools*, 3, 209–229. <https://doi.org/10.1080/15700760701263790>