

A COMPARATIVE STUDY OF THE EARLY-CAREER EXPERIENCES OF NOVICE TEACHERS AND EXPERIENCED TEACHERS IN PUBLIC SCHOOLS OF QUETTA DISTRICT

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Abstract

A qualitative comparative case study was conducted to analyze the experiences and perceptions of novice and experienced teachers in the public schools of Quetta District, Balochistan, regarding the structuring of classroom practices throughout their careers. Utilizing a multi-case-study design, twenty teachers from the government schools of Quetta District were interviewed; ten novice teachers having served for one to two years in the government schools (Case One), and ten experienced teachers having served for twelve years to twenty-two years in the government schools (Case Two). The data collected were analyzed utilizing a process of initial (open) coding, focused coding, theme development, within-case analysis, and cross-case synthesis. The results of the study revealed that while both groups had to function under almost the same set of conditions (large classes, multilingual students, scarcity of resources, multigrade instruction, examinations, ongoing curricular reforms, and lack of formal induction), they had very different relations with respect to time and cognition towards these structural constraints. Experienced teachers had converted many recurring situations into anticipatory judgment, durable professional infrastructure, longitudinal assessment practice, critical curriculum mediation, and generative mentoring of newer colleagues. The central cross-case finding characterizes professional growth as a movement from costly calibration to generative expertise under persistent constraint, with expertise remaining domain-bound, context-specific, and renewable whenever genuinely novel demands arise. The study concludes that experience becomes expertise only when it is recognized, retained, tested, and organized, and recommends structured, context-specific induction and mentoring systems that formalize the tacit professional knowledge that experienced teachers currently provide informally and without institutional recognition.

Introduction

Teaching is widely recognized as a profession in which competence is built cumulatively, through repeated encounters with the practical demands of the classroom rather than through the transmission of technique alone (Berliner, 2001; Feiman-Nemser, 2001). The transition from preservice preparation to independent classroom responsibility is well documented as one of the most cognitively and emotionally demanding periods in a teacher's career, frequently described in the international literature as a form of "reality shock" in which the idealized, orderly classroom of teacher training gives way to the simultaneity, unpredictability, and resource limitations of an actual school (Veenman, 1984; Kagan, 1992). At the opposite end of the career continuum, experienced teachers are understood to have developed forms of professional knowledge that are qualitatively, not merely quantitatively, different from those of beginners: rapid situational perception, compressed decision-making, and a repertoire of context-specific routines that free cognitive capacity for more complex professional work (Berliner, 2004; Tsui, 2003).

In Pakistan, and particularly in Balochistan's provincial capital, Quetta, these globally documented tensions are intensified by structural conditions that are only partially represented in the international literature on teacher development. Public-school teachers in Quetta district routinely manage class sizes well beyond international norms, multigrade classrooms in which a single teacher is responsible for several grade levels simultaneously, chronic shortages of laboratory and instructional materials, linguistically diverse classrooms in which Pashto-, Balochi-, Brahui-, and Urdu-speaking learners must access an Urdu- or English-medium curriculum, high-stakes board-examination accountability beginning in the middle grades, and recurring curriculum reforms implemented with little sustained implementation support. Formal induction and structured mentoring for newly

appointed teachers remain weak or absent in most government schools, leaving new teachers dependent on whatever informal support is available from senior colleagues.

Despite the scale of these challenges, comparatively little qualitative research has directly examined how novice and experienced teachers working within the same demanding public-school system differ in their lived professional experience, their decision-making processes, and the practical knowledge they draw upon. Much of the international novice-expert literature was generated in resource-adequate settings and does not fully capture how professional development unfolds when the structural conditions of practice do not improve with experience. The significance of this comparison in the realm of teacher education and induction policy is clear in light of the sheer numbers of newly qualified teachers who enter the public school system in Balochistan each year with formal qualifications but practical preparation that may or may not coincide with the reality of the classroom environment in which they will find themselves.

To address this deficit, this study conducted an in-depth qualitative comparative analysis of 10 novice and 10 experienced public school teachers in Quetta district. The following questions guided the research design:

1. How do novice teachers perceive the first stages of their teaching careers in public schools in Quetta district?
2. How do experienced teachers explain the formation of their professional knowledge, decision-making processes, and professional identity throughout their careers?
3. What are the main similarities and differences in professional experiences, decision-making processes, and practical professional knowledge of novice and experienced teachers working in the same conditions?
4. What are the mechanisms behind the formation of professional knowledge from classroom experiences in this case?

To answer the above questions, the study used parallel qualitative procedures to compare two purposively bounded cases: initial coding, focused coding, theme generation, within-case analysis, and cross-case analysis. The study aimed to examine the mechanisms underlying the organization of experience into professional knowledge, rather than simply noting the differences between the two categories of teachers in this setting. Thus, the study's findings are expected to shed light on the design of induction programs, mentoring systems, and professional development in general for teachers in Balochistan's public schools and for those who work in similarly constrained contexts.

Compared with other provinces of Pakistan, the education system of Balochistan has traditionally been the least capable of addressing structural constraints, such as teacher shortages, poor-quality school infrastructure, and relatively low rates of context-specific training for in-service teachers. Novice teachers are often assigned to teaching posts without adequate familiarity with the school, grade setup, and student body they will be working with. In rural and peri-urban areas, they are often required to teach multiple grades, for which they have had virtually no preservice training. Meanwhile, there is a large group of experienced teachers from the government sector who have worked in these same conditions for more than a decade and thus possess practical professional knowledge of how to address these problems in real life. This study treats this practical knowledge as an independent phenomenon worth studying, rather than merely as a standard against which novices' difficulties should be measured.

Literature Review

Stage Models of Teacher Development

For research comparing novice and experienced teachers, the theoretical starting point must be provided by the general theory of skill acquisition formulated by Dreyfus & Dreyfus (1980). This theory assumes the development of performance from the novice stage through the advanced

beginner, competent, and proficient stages, culminating in the expert stage. The novice's performance is guided by explicit rules that must be applied regardless of context; the expert's performance is intuitive, holistic, and unconscious, leaving conscious attention free to solve novel problems. Berliner (2001, 2004) has adjusted this theoretical framework to teaching performance and suggested a developmental trajectory from novice through advanced beginner, competent, proficient, to expert stages. According to Berliner, expert teachers perceive classroom events differently from novice teachers: while the latter see separate behaviours that require separate decisions, the former see meaningful patterns that require quick responses. Thus, both Dreyfus & Dreyfus's and Berliner's theories assume that expertise is domain-specific. This assumption is highly relevant to our study, as we found that experienced teachers' judgments did not automatically transfer to the completely new content of the curriculum.

In addition to the theoretical framework based on stages of teacher development, Fuller's (1969) classical theory of teacher concerns has to be discussed. According to Fuller, beginning teachers are first concerned with their own self-survival and how to accomplish the teaching task, and then with the learning of particular students. This theory is generally consistent with the observed trajectory of teacher development from anxious calibration to more diagnostic, student-centred performance. Huberman's (1989) theory of teachers' professional life cycle includes early stages such as survival and discovery, followed by a stabilization phase, and then divergent stages of experimenters, conservatives, and disengagers. Huberman's theoretical framework warns us against simplistic assumptions about uniform development due to experience, as confirmed by our study's results.

Reality Shock and the Problems of Beginning Teachers

Several studies, such as the seminal review by Veenman (1984) on the "problems of beginning teachers," have described the common issues new teachers face, including classroom management challenges, high workload, test anxiety, and feelings of isolation. In addition, the literature review conducted by Kagan (1992) on the professional development of preservice and new teachers showed that novice teachers are primarily concerned with classroom management problems and self-perception, and therefore lack the time and energy to develop more advanced pedagogical skills and diagnoses. Recent research on teacher induction and mentoring (Ingersoll & Strong, 2011) shows that induction and mentoring programs may accelerate this process; thus, the present study's findings on the inadequacies of informal mentoring in Quetta are highly relevant.

Situated and Tacit Professional Knowledge

A second body of theory that informs the current research involves situated and sociocultural approaches to professional learning. The concept of legitimate peripheral participation in communities of practice offered by Lave & Wenger (1991) suggests professional expertise to be knowledge that is constructed through participating in a socio-material context as opposed to being transmitted independently from the said context; such theoretical position is in line with the result of the current study revealing that novice teachers' early competence was largely borrowed from textbook sequencing as well as from the tacit knowledge of their experienced colleagues. The distinction made by Schön (1983) between reflection-in-action and reflection-on-action sheds additional light on the process by which experienced teachers in the current study reported making changes in their teaching practice through quick, mostly automatic judgments of the instructional process, while reserving deliberation for planning and unusual situations. The concept of pedagogical content knowledge introduced by

Shulman (1987) as a fusion of one's subject-matter knowledge with the knowledge of ways to convey and adapt this knowledge to specific students can serve another angle through which the current research findings about the different perspectives of experienced teachers as opposed to novices towards recurrent problematic issues can be viewed. A study by Tsui (2003) on expert versus novice ESL teachers, which shares design similarities with the current research, revealed similar results regarding expertise in perceiving and reflecting on class activities.

Professional Identity and Assessment Literacy

The topic of teacher identity in contemporary literature is no longer viewed as an immutable characteristic but rather as one that is constructed through professional experience, social interaction, and contextualization. Early identity formation in teachers is said to be characterized by issues of survival and classroom management. In contrast, later in their careers, identity includes notions of expertise and specialized authority, ownership of particular teaching practices, and a need to develop others. The process is highly correlated with the literature on teacher assessment literacy and differentiates between two types of assessment: episodic assessment as a measure of checking the current level of students' understanding and systemic and longitudinal assessment aimed at guiding differentiated teaching; the latter type of assessment requires an automatic classroom management system allowing more time for gathering evidence and analyzing its data. Finally, the mentoring literature offers a new perspective on identity, viewing mentoring as a tool for demonstrating professional maturity and the ability to transform implicit knowledge into knowledge that can be transferred and used by another teacher.

Teacher Development in Resource-Constrained and Global South Contexts

However, another body of research, somewhat smaller but growing, has focused on teacher

development specifically in resource-constrained public education systems in South Asia and elsewhere in the Global South, highlighting how large class sizes, multigrade organization, multilingual classes, and limited formal support structures contribute both to the challenges faced by beginning teachers and the practical expertise acquired by experienced teachers. It is recognized here that teacher development in resource-constrained settings cannot be explained through models based mainly on observations in resource-adequate environments, since the structural conditions prevailing in many poorly resourced public schools do not vanish as a result of teacher experience, but rather that teachers need to acquire expertise that functions within the constraints of such structures. The body of literature on the implementation of curriculum reform in Pakistan also suggests that teachers in public schools have often been required to implement one reform after another without sufficient translation into the local context or support for feasibility, thus placing a heavy burden of interpretation on individual teachers' professional judgement.

Conducted specifically in Pakistani public school systems, various studies have consistently pointed out class size, multigrade teaching in rural and peri-urban schools, linguistic mismatch between the language of instruction and children's home languages, poor or patchy in-service training, and lack of instructional materials as structural features common to the schools that determine both the need for teacher preparation and classroom practice. In addition, concerns regarding the capacity of preservice teacher education curricula, ranging from B.Ed to Associate Degree in Education, to prepare new teachers for the particular combination of demands they face in government schools have been raised, a question that is reflected in this study's finding that novice participants were not prepared for the simultaneous, multigrade, and resource-poor conditions of their placements. Nevertheless, very few studies in this setting have

compared novice and experienced teachers operating in the same structural environment in a matched, in-depth qualitative design.

Conceptual Framework

Collectively, these bodies of research indicate that the novice-experienced teacher dichotomy is not merely a case of deficits and mastery, but is indicative of an explanatory model of learning and development whereby through repetition and experiences that are structurally similar, expertise in teaching develops through the processes of recognition, retention, testing, and social transmission, in a process that is domain-specific and context-limited, and which is open to renewal when faced with genuinely novel challenges. This study draws on a combination of stage, situated, and contextual theoretical approaches in a unified approach based on realist CMO methodology (inspired by case-study approaches developed by Yin, 2018 and Stake, 1995) to not only consider how the two groups of teachers differed, but also the mechanism by which one state led to another.

Methodology

Research Design

The study used a qualitative comparative multiple case study design (Stake, 1995; Yin, 2018), in which each of two purposely bounded cases—novice and experienced teachers—was examined thoroughly before comparing the two. A case study was chosen for this study due to the nature of the research questions posed, which demanded a holistic understanding of how professional experience operates within a particular structure, rather than an abstract measure of teachers' attributes. The purposeful bounded cases were those at a particular stage in their careers (novices: between 11 and 24 months in government service; experienced: between 12 and 22 years in government service), working in the same institution (government schools in Quetta district). The coding process used a case-first strategy, in which each case was coded, analyzed,

and interpreted separately before comparing the two.

Participants and Sampling

Twenty government-school teachers in Quetta district were recruited through purposive sampling, designed to maximize contextual comparability while capturing variation across school level, subject area, and gender. Case One comprised ten novice teachers with between eleven months and two years of government teaching service, drawn from government primary, middle, and secondary schools, teaching across early years, primary, middle school science and social studies, and secondary mathematics and science classrooms, including one teacher in a small multigrade primary school. Case Two comprised ten experienced teachers with between 12 and 22 years of government teaching service, drawn from comparable school levels and subject areas, including a multigrade primary teacher, secondary science and mathematics teachers, and a middle school social studies teacher. Where possible, experienced participants were purposively matched to novice participants by subject, grade band, or structural context (for example, multigrade teaching, large Class 5 sections, and board-examination subjects) to strengthen later matched-context comparison. Table 1 summarizes participant characteristics for both cases.

Data Collection

Data were collected through in-depth, semi-structured interviews conducted individually with each of the twenty participants in their own classrooms after school hours. Interviews followed a common interview guide covering entry into the profession, classroom management, lesson planning, pedagogical adaptation, assessment practice, engagement with curriculum and policy, professional identity, and mentoring relationships, allowing systematic comparison across participants while permitting follow-up probing specific to each teacher's account.

Interviews were conducted in Urdu or in a mixed Urdu-English register, consistent with participants' everyday professional language, and later translated into English for analysis; interview duration ranged from approximately 45 to 70 minutes—all interviews were conducted with participants' informed consent. Pseudonyms were assigned to all participants, and identifying school details were generalized to protect confidentiality.

Data Analysis

Data analysis proceeded through five sequential stages for each case before cross-case synthesis. First, initial (open) coding was conducted at the level of the meaning unit—a complete participant response or coherent response segment—producing 160 coded meaning units and 533 initial code applications for Case One, and 155 coded meaning units and 767 initial code applications for Case Two. Coding combined descriptive, process (action), and emotion codes, together with selected in-vivo expressions drawn from participants' own language. Second, focused coding consolidated and compared initial codes through constant comparison across interviews, producing twelve focused codes for each case with explicit inclusion and exclusion criteria and a documented audit trail. Third, thematic development organized focused codes into a final thematic framework of five themes for each case, supported by thematic maps, negative-case review, and a participant-by-theme matrix documenting within-group variation. Fourth, within-case analysis integrated the completed themes into a case narrative, a set of case-level analytic assertions, embedded-unit (participant-level) configurations, a context-mechanism-outcome explanation, and a within-case explanatory model, with explicit attention to deviant and negative cases that qualified or complicated the emerging pattern. Fifth, cross-case analysis compared the two completed within-case analyses through a twelve-domain transformation matrix, ten cross-case meta-themes, seven matched-context clusters comparing novice and experienced teachers

working in comparable subject and grade contexts, a cross-case context-mechanism-outcome explanation, an integrated explanatory model, and ten cross-case analytic assertions and propositions.

Trustworthiness

Several procedures supported the trustworthiness of the analysis. A case-first analytic sequence preserved the internal coherence of each case before comparison. Every major cross-case conclusion was checked against a common domain matrix, and both case-level explanatory models and group-level conclusions were further tested against individual participants and matched-context clusters rather than relying solely on aggregate descriptions. Negative and deviant cases, such as novices who demonstrated mature niche adaptation and experienced practitioners who felt the need for more deliberate effort in preparing for novel curriculum material, were not discarded but kept to provide boundaries for the emerging development theory. The comparative results kept timestamped references to the transcripts to ensure that it was possible to trace back the findings. Other possibilities, such as the potential role of retrospective reconstruction by experienced individuals, the career-stage vs generation effect in relation to changes in class size, staffing, and security conditions over time, and the problem of relying on self-reported practice rather than observed practice, were considered.

Ethical Considerations

Participation was voluntary, and informed consent was obtained from all participants prior to interview, with assurance of confidentiality and the use of pseudonyms in all reporting. Interviews were conducted at a time and location convenient to participants, and no identifying institutional information beyond general school level and setting is reported in this article.

Researcher Positionality and Data Management

Throughout data collection and analysis, the researcher maintained a reflexive awareness of how framing interview questions comparatively—explicitly situating experienced teachers' accounts in relation to novice colleagues' reported experiences—could shape participants' responses toward contrastive self-presentation. This possibility is explicitly treated as a rival explanation in the trustworthiness procedures described above, rather than as a neutral feature of the design. All transcripts, coding decisions, and analytic memos were retained and cross-referenced by timestamp to support traceability from final assertions back to original participant language, and coding was revisited iteratively across the initial, focused, and thematic stages to ensure that emerging interpretations remained grounded in, rather than imposed upon, participants' accounts. Each analytic product—initial coding report, focused coding report, thematic development report, and within-case analysis—was completed and reviewed for internal consistency before the subsequent analytic stage began, consistent with the case-first sequence described above.

Findings

Participant Characteristics

Table 1 presents the demographic and contextual characteristics of the twenty participants across both cases.

Table 1

Demographic and Contextual Characteristics of Participants (N = 20)

Case	Pseudonym	Role / Grade Level	Subject Area	Years of Service
Case One	Ambreen Shah	Class 1-2, Girls Primary	General / Early Years	1 yr 4 mo
Case One	Waqar Ahmed Jomezai	Class 9-10, Boys Secondary	Science	1 yr 9 mo
Case One	Rukhsana Bibi	Class 1-5 (multigrade), Primary	General / Multigrade	1 yr 2 mo
Case One	Fahad Baig Tareen	Class 6-8, Boys Middle	Social Studies	1 yr 6 mo
Case One	Sidra Yousaf	Class 3-4, Girls Primary	General	11 mo
Case One	Uzma Rind	Class 5, Girls Primary	General	1 yr 8 mo
Case One	Zeeshan Panezai	Class 9-10, Boys Secondary	Mathematics	2 yrs
Case One	Farheen Kakar	Class 2, Girls Primary	General	1 yr 3 mo
Case One	Bilal Ahmed Umrani	Class 6-8, Boys Middle	Science	1 yr 11 mo
Case One	Mahnoor Baloch	Class 3, Girls Primary	General	1 yr
Case Two	Nasreen Kakar	Class 5, Girls Primary	General	16 yrs
Case Two	Ghulam Sarwar Jomezai	Class 9-10, Boys Secondary	Physics / Chemistry	20 yrs
Case Two	Bibi Zainab	Class 1-5 (multigrade), Primary	General / Multigrade	22 yrs
Case Two	Abdul Qadir Tareen	Class 6-8, Boys Middle	Social Studies	18 yrs
Case Two	Shaheen Akhtar	Class 2-3, Girls Primary	General	14 yrs
Case Two	Robina Sadiq	Class 5, Girls Primary	General	15 yrs

Case	Pseudonym	Role / Grade Level	Subject Area	Years of Service
Case Two	Sikandar Yousafzai	Class 9–10, Boys Secondary	Mathematics	19 yrs
Case Two	Naseem Akhtar	Class 2, Girls Primary	General	13 yrs
Case Two	Rashid Minhas	Class 6–8, Boys Middle	Science	17 yrs
Case Two	Samina Gul	Class 3, Girls Primary	General	12 yrs

Note. Case One = novice teachers (11 months–2 years of service); Case Two = experienced teachers (12–22 years of service). All participant names are pseudonyms.

Case One: The Novice Teacher Experience

Analysis of the ten novice-teacher interviews produced a thematic framework of five interlocking themes: entry into teaching, provisional stabilization, developing contextual

perception, converting incidents into a professional repertoire, and uneven professional expansion beyond core classroom practice. Table 2 summarises this thematic framework.

Table 2

Mapping of Within-Case Themes across Case One and Case Two

Case One Theme	Case Two Theme	Cross-Case Interpretation
Thrown into Complexity: Preparedness Unravels in the Real Classroom	Seeing Before It Happens: Experience Becomes Anticipatory Judgment	The situations remain similar, but their meaning shifts from collision to predictive signal.
Borrowed Stability: External Scaffolds Hold Practice Together	Storing Experience: Repertoires, Records, and Instructional Autonomy / Passing Expertise Forward	External scaffolds used by novices become owned infrastructure and mentoring resources among experienced teachers.
Learning to Read the Classroom: From Control to Context-Responsive Practice	Seeing Before It Happens / Expertise Made in Place	Emerging contextual reading develops into preventive, specialized, and largely automatic practice.
Turning Incidents into Expertise: Building a Reusable Repertoire	Storing Experience: Repertoires, Records, and Instructional Autonomy	Early routines and notes mature into extensive libraries, records, plans, and diagnostic systems.
Beyond Survival, but Not Yet Complete: Uneven Professional Expansion	Reading Beyond the Textbook / Passing Expertise Forward	Assessment, policy engagement, and contribution move from lagging frontiers to major domains of later-career practice.

Note. Theme labels are drawn from the final thematic frameworks developed independently for each case prior to cross-case synthesis.

Thrown into complexity. New teachers all spoke of entering the government-school system as an unsettling experience of colliding with a well-organized, single-classroom model presented to them in their training courses with a situation involving multiple tasks and limited resources. Ambreen Shah, who was teaching Class 1-2, talked about her initial days of handling thirty-seven young children by saying that she was "thrown into deep water very suddenly." In contrast, Rukhsana Bibi, who was posted immediately to a multigrade primary school, teaching five different grade levels between two teachers, said that her training had prepared her for a single-grade classroom that did not match the multigrade classroom she had to teach in. The story told by Bilal Ahmed Umrani, of giving up on his plan to conduct a chemistry experiment because of a shortage of materials in the laboratory, which were even expired, explains the extent to which a lack of resources, rather than inexperience, contributed to destabilization.

Borrowed stability. As internal expertise was not yet available for novice teachers to rely on, they had to resort to external scaffolding mechanisms. Ambreen kept planning her daily lessons with great detail using the OMAA format, which her training program aimed at, taking more than forty-five minutes to an hour every day more than a year after her induction, and depended greatly on the sequence followed in the textbook as she was too shy to deviate from it yet. In the case study under discussion, the use of sequencing in the textbook, writing detailed plans, and taking advice from experienced peers were ways in which the novices were able to manage the risks related to inadequate curriculum coverage and classroom management, since they had little internal repertoire. Informal mentoring accelerated this stabilization where it was accessible.

Learning to read the classroom. Professional development began to show results when the novices started to respond not only to the events that had occurred but also to the underlying

patterns and causes of those events. For instance, Amreen talked about how she was able to resolve a dispute among children over pencils in just 30 seconds, compared to what she would do a year ago, when this event would have made her stop everything in the class. Zeeshan Panezai's realization that the second time he explained an algebraic topic to his students, it was no different from the first time happened during the third week of his teaching career.

Turning incidents into expertise. With the emergence of recurring problems, several novices began turning them into lasting solutions: the seating problem became a rotation process, and the shortage of resources was solved by Bilal adopting a discussion of the prediction approach rather than a practical demonstration. At the same time, Rukhsana devised a rotation scheme for multigrade classwork, prioritizing daily trials and consistent practice. In this context, it should be noted that within a year of his service, Mahnoor Baloch had already developed an organized pattern library, whereas Zeeshan had developed an ongoing topic-level gradebook; both cases suggest that experience codification is not solely a matter of tenure.

Beyond survival, but not yet complete. While core classroom management and delivery became increasingly stable during novice development, other components of professional practice—assessment practices, broader policy engagement, and contributions to fellow teachers—were not as smoothly acquired. The majority of novice teachers continued to rely on memory, impressions, and regular quizzes rather than systematically tracking progress, and policy engagement was confined to issues relevant only to current lessons or examinations. However, a subgroup of near two-year teachers began giving informal advice to novice colleagues, indicating the first signs of moving outwards in professional identity formation, a development that would be

fully developed among experienced teachers in Case Two.

In summary, the within-case analysis of Case One showed that novice teacher development is a process of **becoming through constraint**, in which disruptive experiences at early stages are gradually turned into professionally organized knowledge, based on the availability of local support rather than the duration of experience. Case-level assertions made based on this analysis included recognition of the relational nature of the novice problem and its dependence on the context, the significance of automaticity despite the limited scope of its application, the role of mentoring as an active mechanism dependent on accessibility and psychological safety of the process, and asynchronous development of management, delivery, assessment, and policy engagement.

Case Two: The Experienced Teacher Experience

Analysis of the ten experienced-teacher interviews produced a corresponding thematic framework of five themes: anticipatory perception, the conversion of experience into professional infrastructure, situated and specialized expertise, critical curriculum mediation, and generative professional identity through mentoring. Table 2 also summarizes this framework alongside its Case One counterpart.

Seeing before it happens. Experienced teachers consistently described managing their classrooms through what several termed an almost automatic, anticipatory reading of the room. Nasreen Kakar, managing forty-three girls, reported sensing—often before any actual disruption—what combination of students, time of day, or activity was likely to produce restlessness, and adjusting preemptively, in a way she said she could not do earlier in her career. Ghulam Sarwar Jomezai and Sikandar Yousafzai, both secondary teachers of examination subjects, described comparable pattern recognition rooted in subtle shifts in posture, noise level, and tone that allowed intervention

well before a disruption became visible to others in the room. This compression of perception and judgment into rapid, largely automatic response constituted the clearest qualitative marker distinguishing experienced from novice practice across the case.

Storing experience. Where novices relied on borrowed external structures, experienced teachers had converted repeated experience into owned professional infrastructure. Rashid Minhas maintained a personal reference system recording which alternative techniques had worked for which specific topics across many years of resource-limited science teaching, while Ghulam Sarwar and Sikandar Yousafzai both reported that planning for already-taught content now took approximately fifteen minutes of light review, compared with close to an hour for genuinely new curriculum material introduced through recent reform—evidence that automaticity is domain-specific rather than global. These personal libraries, weekly-block plans, and tracking systems served as durable professional memory, reducing redesign and, in principle, allowing them to be shared with colleagues.

Expertise made in place. Experienced teachers' practical knowledge was strongly situated in the particular learners, subjects, and constraints they had repeatedly encountered rather than generic across contexts. Bibi Zainab, twenty-two years into a multigrade posting that began, like a newly interviewed colleague's, with no formal preparation for multigrade instruction, had developed rhythmic coordination across five grades, modular weekly planning, and peripheral-attention techniques resilient to staffing changes—yet her assessment practice remained comparatively simplified because multigrade workload continued to constrain even this extensive expertise. This pattern illustrates that structural constraints can generate sophisticated, locally specialized professional knowledge without resolving the underlying constraints themselves.

Reading beyond the textbook. Career stage had a significant impact on how participants viewed themselves in relation to the curriculum and policy, but did not relieve them from responsibility toward it. While novices found comfort in following the textbook's sequence, experienced teachers treated the textbook as one of the resources for reference and alignment, while critically engaging with the curriculum framework, contrasting different reform periods, and decoding the policy through their local experience base.

Passing expertise forward. Professional identity for experienced teachers included more than individual classroom competence; it also encompassed the explicit process of imparting knowledge to new teachers. Mentoring was an important part of the professional identity of some participants, who viewed it as a way to transfer knowledge gained from personal struggles, making themselves an accessible resource for newer teachers and thereby reducing their learning time. However, participants reported frustration with structural shortcomings in multigrade teaching support, lab resources, multilingual teaching assistance, and induction, which had persisted throughout their professional careers, indicating that professional strength, individually and

informally developed, existed alongside ongoing institutional neglect.

Five stages in the development of the professional identity of Case Two can be summarized within the case narrative as remembered beginning with uncertainty in structurally difficult conditions; repetition and recognition where situations repeated themselves enough times to acquire predictable meaning for successive generations; professional encoding where solutions for the problems were encoded as individual knowledge and made accessible; anticipatory practice where the conditions were designed before the problem occurred; and critical/generative maturity where the release of cognitive energy enabled systematic assessment, curriculum interpretation, and mentoring. Case-level assertions included that the autonomy of experienced teachers from textbooks was related to their curricular and examination responsibilities, that their assessment was deepened, particularly due to the cognitive burden of classroom management. That expertise, although broad, was still related to specific subjects and grades under specific structural conditions.

Cross-Case Comparison

The cross-case synthesis compared the two completed case analyses across 12 common domains, summarised in Table 3, and produced 10 cross-case meta-themes and 10 integrated analytic assertions.

Table 3

Cross-Case Transformation Matrix across Twelve Comparative Domains

Comparative Domain	Case One: Novice Pattern	Case Two: Experienced Pattern	Cross-Case Transformation
Relationship to difficulty	Difficulty arrives as a destabilizing, cognitively expensive event.	Difficulty is often anticipated, prevented, or built into design.	Temporal relocation from reaction to anticipation.
Decision process	Conscious calibration, second-guessing, and effortful selection.	Rapid pattern recognition and largely automatic judgment for recurring situations.	Compression of routine cognition.

Comparative Domain	Case One: Novice Pattern	Case Two: Experienced Pattern	Cross-Case Transformation
Planning	Detailed, time-consuming, often produced from scratch.	Selection and light adjustment from refined personal libraries; fresh effort for new content.	From compensatory preparation to reusable infrastructure.
Textbook use	Primary sequence, security, and defensible instructional script.	Content reference, checklist, and examination-alignment tool.	From dependence to accountable autonomy.
Classroom management	Visible correction, routine-building, and emerging relational responses.	Subtle prevention, environmental design, and preemptive social reading.	Earlier and less disruptive intervention.
Pedagogical adaptation	Tentative local workarounds through trial and mentor guidance.	Refined, topic-, learner-, and context-specific repertoires.	From emerging adaptation to situated specialist expertise.
Assessment	Memory, general impressions, standard quizzes, limited deeper tracking.	Longitudinal, granular, skill-specific records linked to intervention.	From episodic checking to diagnostic evidence systems.
Curriculum/policy	Orientation-level awareness and immediate-practice horizon.	Framework reading, reform-cycle comparison, and critical local translation.	From enactment to mediation.
Professional identity	Forming, bounded, strongest within familiar routines.	Settled, specialized, and generative.	From self-stabilization to contribution.
Mentoring position	Primarily recipient; occasional early peer support.	Mentor and carrier of tacit contextual knowledge.	Reversal of knowledge flow.
Structural constraints	Surprises that intensify overload and improvisation.	Persistent conditions incorporated into resilient systems.	Adaptation without structural resolution.
Genuine novelty	Returns teacher to deliberate uncertainty.	Also restores first-principles planning and learning.	Continuity across cases: expertise remains bounded.

Note. Matrix synthesized from the independent within-case analyses of Case One and Case Two.

The same demanding context, a different temporal relationship to difficulty. In almost all

areas that were compared, there was very little difference in the structure of the environment that

the two cases were working in - large class sizes, linguistically diverse students, lack of resources, multigrade teaching, examinations, and lack of formal induction. Experience did not alter the structure but shifted the teacher's place in the process.

From costly calibration to anticipatory perception. However, while more confidence was an important change, the real shift in development was from a conscious, effortful process of calibration to a quicker process of pattern recognition. Novices calibrated carefully for how strict to be, when to do something, why to explain something, and what response to use; the experts noticed posture, silence, energy, positioning, and misconceptions.

From borrowed scaffolds to owned infrastructure. Detailed planning, textbook sequencing, and mentor advice, which functioned as risk-management devices for novices with thin internal repertoires, corresponded across the cross-case comparison to personal libraries, alternative explanations, and tracking systems that constituted durable, shareable professional infrastructure among experienced teachers.

From reactive adjustment to preventive design. Where novices increasingly replaced rigid, whole-class control with proximity and relationship-based routines, experienced teachers redesigned grouping, circulation, lesson mode, and resource assumptions before disruption or failure emerged—a preventive form of expertise that is temporally earlier and less visible than its novice counterpart.

From emerging local adaptation to situated, specialized expertise. Multigrade rotation, resource-limited science pedagogy, and relationship-based management, which several novices had begun to construct, corresponded in the experienced case to refined, specialist systems for the same structural problems, forming a

continuum of situated expertise rather than two discrete categories.

From episodic assessment to longitudinal diagnostic action. Most novices relied on memory, general impressions, and standard quizzes. At the same time, experienced teachers maintained skill-, topic-, or reasoning-specific records used across weeks or the academic year to plan targeted support—a contrast that appears to depend on the cognitive capacity released once routine classroom work became less demanding.

From textbook-mediated enactment to critical curriculum mediation. Novice policy engagement remained close to immediate lesson relevance, while experienced teachers compared successive reform cycles and translated policy through accumulated contextual and longitudinal knowledge.

From bounded professional identity to generative professional agency. Novice confidence, though genuine, remained bounded within familiar routines, with only a few near-two-year teachers beginning to offer informal guidance to colleagues; experienced professional identity had become settled, specialized, and explicitly generative through mentoring.

Persistent institutional gaps produce compensatory professionalism in both cases. Formal induction, resourcing, and context-specific policy support remained weak across both cases. Novices depended heavily on the chance availability of supportive colleagues, while experienced teachers had become informal institutional infrastructure—creating systems, interpreting reforms, and mentoring others—while explicitly expressing frustration that structural problems remained unresolved across decades of service.

Expertise is bounded, renewable, and reactivated by genuine novelty. Years of service did not confer general mastery. Experienced teachers reported first-principles preparation, comparable in duration to a novice's planning process, when facing genuinely new curriculum content, indicating that automaticity remains domain- and context-bounded rather than global. That expertise is actively maintained rather than permanently completed.

Matched-context comparisons. Of the seven matching contextual clusters, each paired novice teachers against experienced teachers in identical subject, grade-band, or structural contexts, thereby intensifying the comparative power of a domain-level study through direct comparisons. For novice primary teachers such as Ambreen, Sidra, Farheen, and Mahnoor in early-primary and lower-primary classroom contexts, learning involved building individual routines in response to problems and tracking learning primarily through memory, while experienced teachers such as Shaheen Akhtar, Naseem Akhtar, and Samina Gul had developed transition signals, seating plans, helper designations, and visual cues into an integrated and preventive whole room system. Similarly, for Novice teachers such as Uzma Rind in a large Class 5 context, management based on proximity was reliably established and opening routines were stable, but extensive planning and mental monitoring of learners who needed help continued; while Nasreen Kakar and Robina Sadiq managed learners using the technique of automatic weak signal reading, combined with planning libraries and weekly skill records. In secondary science classes under board examination pressure, Waqar Ahmed Jomezai relied on preparation, quizzes, and mentoring debriefing, but continued to feel anxiety regarding coverage; on the other hand, Ghulam Sarwar Jomezai was able to rely on examination knowledge of multiple cohorts, specific topic record keeping, and several possible explanations for each topic. In multigrade settings, Rukhsana Bibi's trial-and-

error-based, workable rotation was paralleled by Bibi Zainab's rhythmically coordinated, module-wise system, which was also resistant to staffing problems. In social studies class, dealing with sensitive regional history, Fahad Baig Tareen was still experimenting with the combination of strictness, analysis, and evaluation, while Abdul Qadir Tareen possessed the professional maturity to recognize that the community perspective would need to be acknowledged in explaining sensitive historical material. Finally, in secondary mathematics, Zeeshan Panezai's purposeful preparation of a second explanation, along with his emergent topic gradebook, paralleled the multiple explanations Sikandar Yousafzai prepared for specific misconceptions. Lastly, in resource-constrained middle school science, Bilal Ahmed Umrani's actively developing notes on techniques for overcoming resource constraints paralleled Rashid Minhas's well-developed, longitudinal reference system premised on assumptions of scarcity.

Boundary cases. The contrast did not come down to a deficit-and-mastery dichotomy. There were several novices, like Bilal and Rukhsana, who showed highly developed niche adaptation within the first two years of work; Zeeshan created an organized grade book way ahead of when extended experience would have led to such an achievement; and Farheen Kakar coped efficiently with an unusual medical situation, which proves that novices can do a good job outside the framework of routine activities. On the other hand, the extended preparation time for new curriculum material by experienced teachers, and Bibi Zainab's continually restricted assessment activity despite multigrade teaching, prove that even experience does not solve everything.

Integrated Cross-Case Explanation

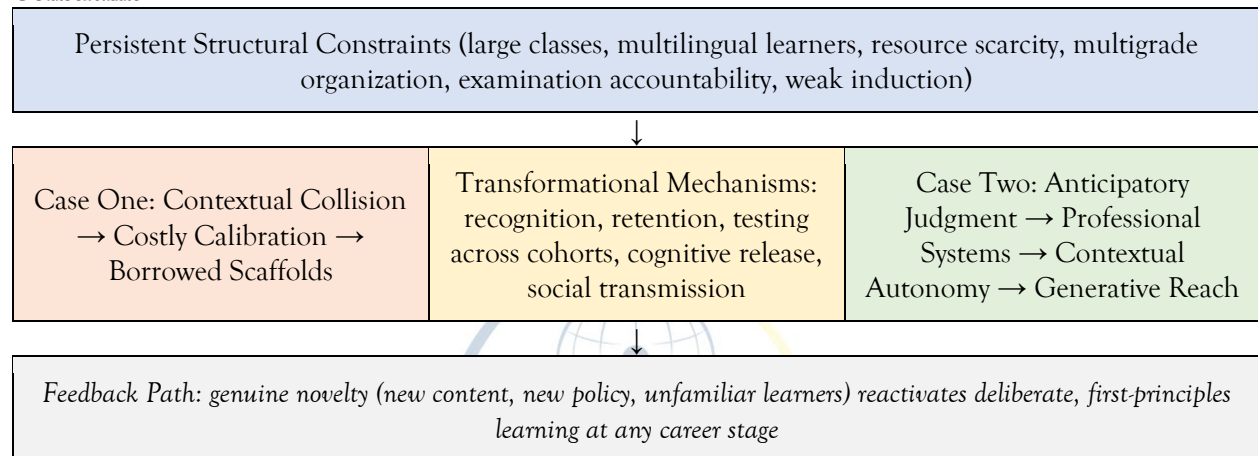
It is possible to interpret the cross-case pattern as a transition from costly calibration to generative expertise within ongoing structural constraint. The latter development did not happen due to

improvement of conditions, but was achieved via the process consisting of: repeated exposure to structurally similar challenges; understanding of their recurrency and reasons behind it; storing solutions to those challenges within practices, documents, and personal collections;

experimenting with such solutions on new generations of learners; the cognitive relief which came after becoming accustomed to less strenuous practice; and social transmission of the acquired knowledge via mentoring. Figure 1 presents this explanatory model.

Figure 1

Cross-Case Explanatory Model: From Costly Calibration to Generative Expertise under Persistent Constraint



Note. Persistent structural constraints (large classes, multilingual learners, resource scarcity, multigrade organization, examination accountability, weak induction) surround both cases and are not removed by experience. The lower feedback path indicates that genuine novelty at any career stage can reactivate deliberate, first-principles learning.

Discussion

The findings of this study extend and, in several respects, qualify the established international literature on novice-to-expert teacher development while situating that development within the specific structural realities of public schooling in Quetta district. Consistent with Dreyfus and Dreyfus's (1980) general model of skill acquisition and Berliner's (2001, 2004) adaptation of that model to teaching, novice participants' reliance on explicit, conscious calibration and experienced participants' rapid, largely automatic pattern recognition closely mirror the qualitative shift these models predict. However, the present findings extend this literature by demonstrating that, within a persistently under-resourced public-school system, expert-like anticipatory perception developed not because structural difficulty was

reduced by policy or institutional support, but because individual teachers, largely without formal assistance, converted repeated encounters with the same difficult conditions into anticipatory design. This finding is consistent with, but sharpens, Huberman's (1989) caution against assuming uniform professional growth across the career span: growth in this study was real and substantial, yet it depended on individual reflection, retention, and opportunity rather than on the passage of time alone, a pattern visible in the boundary cases of novices who had already constructed systematic assessment tools and experienced teachers who required first-principles preparation for genuinely new content.

The study's findings also extend Veenman's (1984) and Kagan's (1992) accounts of beginning-teacher difficulty by showing that "reality shock" in this

context was substantially produced by a mismatch between training scenarios and the multigrade, large-class, resource-constrained, and multilingual realities of Quetta's public schools, rather than by a general deficiency in novice teachers' preparation. In terms of implications for educators' professional development, this reframe suggests that preservice preparation would benefit greatly from a simulated environment that reproduces the structure of simultaneity, multigrading, and resource scarcity more deliberately.

The result, in this case, that novices' extensive planning and reliance on textbooks provided protective scaffolding rather than mere pedagogical deficiency, is consistent with situated learning theory (Lave & Wenger, 1991), which holds that initial professional knowledge necessarily comes from outside until it is internalized. At the same time, the conclusion that experienced teachers had made such borrowed structure their own—building personal libraries, having alternative explanations and keeping track of students—illustrates well Shulman's concept (1987) of pedagogical content knowledge in a resource-scarce environment: indeed, experienced teachers' multiple, learner-specific explanations of repeating difficulties correspond to what Shulman described as pedagogical content knowledge acquired by way of experience with many succeeding cohorts of Quetta students.

One of the unique contributions of this study to the wider body of international literature is that teacher-made expertise helped fill persistent institutional gaps: weak formal induction of teachers, unresolved multigrading, and inadequate laboratories and multilingual resources, without addressing these gaps themselves. Therefore, there is a need to be cautious in celebrating the documented transition from novice to expert status, since while teachers' accumulated professional knowledge is a source of expertise, its presence cannot be treated by education authorities as a solution to institutional issues. The teachers participating in the study

openly stated that decades of individually assumed responsibility for unresolved issues created by formal institutions are a concern for experienced teachers. The pattern found in this study echoes critical research on teacher resilience in resource-scarce Global South education systems, where individual teachers' resourcefulness can mask the need for adequate institutional investment.

Finally, the result that teachers' expertise remains situational, bounded, and renewable—and not global and complete—also has practical policy implications regarding professional development. It means that even an experienced teacher would need specific assistance when facing truly novel curriculum or reforming demands; and professional development would have to take into account the fact that experience does not necessarily equip experienced teachers to deal with novel content without preparation, similar to that required of novices.

Implications for Teacher Education and Policy

Reading all of the above findings together indicates that the transition between the novice and expert stages in this study is neither an issue of individual skill nor motivation, but rather a developmental process that can be nurtured within institutions rather than relying on serendipity. With the similarity in descriptions of novices when borrowing stability from textbooks, meticulous planning and mentorship in its most readily available form, it is quite evident that the establishment of an induction program centered on these borrowed supports in place of classroom management theories can significantly cut down the time spent on expensive calibration as seen in Case One. The similarities in the description of experts when turning their experiences into personally developed libraries, notebooks, and tracking systems indicate that there is great benefit in establishing a process through which this knowledge can be preserved and spread out instead of having to develop a similar set of knowledge by each subsequent generation of educators who have no access to any help for more

than ten years. Finally, the structural deficiencies in the career paths of the experts indicate that professional development, even when carefully planned, will never replace direct investment in staff, equipment, and facilities.

Theoretical Contribution

In addition to its practical significance, this research adds to the existing theoretical knowledge about teacher expertise by showing that stage-related theories of expertise such as those proposed by Dreyfus & Dreyfus (1980) and Berliner (2001, 2004), situational views of learning such as Lave & Wenger (1991), and contextual approaches to teacher development do not contradict each other but complement one another within a holistic framework. The cross-case evidence presented here supports a synthesized account in which repeated encounter with structurally similar conditions is a necessary but not sufficient condition for expertise: encounter must be recognized as meaningful pattern, retained through internal or externalized memory, tested against successive contexts and cohorts, and, ultimately, made transferable to others before it constitutes the kind of generative, mentoring-capable expertise documented among the experienced participants in this study. This context-mechanism-outcome account offers a more precise explanatory language than stage labels alone for understanding why some novices display advanced niche adaptation while some experienced teachers remain novice-like in unfamiliar domains, and it offers education researchers working in comparable resource-constrained public-school systems a transferable analytic framework for examining professional development without assuming that structural conditions improve as a precondition for expertise to emerge.

Conclusion

In summary, this case study of a pair of novice and experienced public school teachers has explored how teachers perceive and organize the work

demands of classroom activity. The evidence presented here supports the idea of professional development as the organisation of recurrent encounters: teachers become experts in their profession as they recognise, interpret, preserve, and teach themselves the patterns that arise in their practice. For novice teachers, recurring situations were deliberately conscious and required the stability provided by planning, textbook sequencing, and mentoring from more experienced colleagues, until they were internalised as reusable expert knowledge. At the same time, the experienced teachers in this study have made much of those situations into anticipatory judgment, durable professional infrastructure, longitudinal assessment practice, critically informed curriculum mediation, and generative mentoring, while still maintaining accountability for curriculum and examinations. In both cases, the teachers operated under similar structural constraints, and the key developmental change did not consist in the disappearance of difficult work but in the reorientation of teachers' relationship with it from reactive calibration to anticipatory design. Importantly, however, this research has also demonstrated that experience does not confer uniform mastery, as expertise remains context-bound and specific; some novices have shown sophisticated early adaptation, and experienced teachers continue to plan deliberately and return to fundamentals when truly novel curriculum material or conditions arise. Moreover, the developed expertise enabled teachers to address many of the deficiencies in institutional teacher induction, resourcing, and contextual support without resolving them, which directly affects our understanding of the resilience of the public-school teaching workforce in Quetta district. Finally, the comparison presented in this case study shows that the difference between a novice and an experienced teacher in Quetta district lies not in the difficulty of the work they do, but in the degree to which they organize that difficulty through their professional knowledge.

Recommendations

On the basis of these results, a number of suggestions can be made regarding teacher education institutions, school administrators, and education policymakers in Balochistan and similar contexts.

Structured, context-specific induction. The process of induction must take into account the specific structural conditions under which novice teachers operate – large class sizes, multigrade systems, multilingual learners, and limited resources – not only classroom management techniques, and must convert the tacit knowledge of experienced teachers into explicit procedures, explanations, and decision-making rules.

Formalized mentoring structures. Given the contingent and personal nature of mentoring observed in this research, there should be formal mentoring structures that provide time and access to experienced mentors, thereby institutionalising the informal, unacknowledged process of mentoring by experienced teachers.

Shared professional repertoire systems. To ensure that the context-dependent solutions currently developed and kept individually by teachers are not lost, schools or groups of teachers need to find a way to share their repertoire through an activity bank or an alternative explanation library.

Support for systematic assessment practice. A combination of longitudinal assessment and record-keeping strategies that are relatively easy to use, along with adequate time for planning and evaluation, may be used by beginner teachers to learn how to conduct diagnostic assessments individually, without having to wait until managing a classroom becomes second nature.

Feasibility-informed curriculum reform implementation. The planning of curriculum reform needs to incorporate constructive dialogue

among education experts with knowledge from past reform experiences, thereby minimising the need for personal translation by both inexperienced and experienced teachers.

Investment in structural conditions. The professionalism and adaptability displayed here by professionals do not indicate that class size, multigrade teaching, lab resources, and multilingual teaching support are sufficient and should therefore not be interpreted as such; rather, they should continue to be invested in alongside professional training programs.

Limitations

There are several limitations to consider when drawing conclusions from this research. First, the research relies on participants' self-reports rather than classroom observations, and since the experienced teachers reported on their early careers, this was a process of retroactive reconstruction of experiences that could be oversimplified. Second, due to partial correlations between career stages and generational effects, some of the differences identified in the two cases might also result from general changes over time in class size, teaching staff, security conditions, or resources. Third, the non-probability sample of 20 teachers is well-suited for qualitative comparative analysis but cannot be generalized statistically to all novice or experienced teachers in Quetta district or Balochistan. Fourth, the interviews were conducted in Urdu or a combination of Urdu and English, and then translated into English for analysis; while the translation was thorough, some nuances in the participants' initial language may not have been captured. Fifth, the cross-sectional design of the research implies a comparison of two groups of teachers at a single point in time rather than longitudinally following individual teachers' development, thereby limiting the identification of possible patterns and mechanisms.

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