



Recognized by: Higher Education Commission (HEC), Government of Pakistan

Effects of Teacher Licensing on Educators' Professionalism in Global Context: Sindh Case in Local Experts' Perceptions

Dr. Aalungir Shah *

Assistant Director (Research), Sindh Teachers Education Development Authority (STEDA)

aalungirshah@gmail.com

Zain ul Abidin Laghari

Director Quality Assurance, Sindh Teachers Education Development Authority (STEDA)

zainlaghari5@gmail.com

Dr. Kamal Haider

Assistant Professor, Department of Education, Federal Urdu University of Arts Science & Technology, Karachi, Pakistan

kamalhaider@fuuast.edu.pk

***Corresponding Author**

ABSTRACT

Teacher licensing has also been noted to be one of the policy tools that have been identified as essential in maintaining teacher professionalism, accountability, and quality of education. Though world models like Praxis examinations of the United States, the Qualified Teacher Status of England and Singapore integrated National Institute of Education programs provide systematic opportunities of professionalization, emerging contexts face difficulties with implementation gaps. This paper critically reviews the international teacher licensing systems and places them in the context of a new example of Sindh, Pakistan, which implemented its Teaching License Policy in 2023. The data were gathered with the help of a qualitative phenomenological design, which drew document analysis and semi-structured interviews with 11 stakeholders, namely, policymakers, trainers, and licensed teachers. Thematic analysis showed that licensing in Sindh is broadly understood as a major step towards professionalizing teaching, but there are still difficulties in understanding, efficiency of administration and the narrowing of the gap between the theoretical knowledge and classroom practice. Comparative

lessons point to the fact that the framework of Sindh is consistent in relation to the global tendencies of competency-based assessment, but it does not have strong approaches to practicum-based evaluation, continuous development, and international recognition. According to the findings, the enhancement of the policy in the long-term can be reinforced with the help of the integration of induction programs, the optimization of administrative operations, and the correspondence of pre-service curricula to the global standards. This research makes a contribution to the global discourse on teacher professionalization as it offers evidence-based suggestions on the nature of the teacher licensing framework in developing settings and highlights the need to create a balance between the local and the global standards.

Keywords: Competency-Based Assessment, Education Standards, Education Policy Reform, Teacher Licensing, Teacher Professionalization, Teaching License Policy,

INTRODUCTION

It has been long known that quality education serves as a foundation to the development of human capital, social cohesion and economic progress (Howells, 2018). The empirical evidence highlights a high positive relationship between the level of education system and further developmental results of a country (Patrinos and Psacharopoulos, 2020; Hofmarcher, 2021). Quality education, when coupled with more extensive reform, would be an effective poverty alleviator and social mobility device (Chu et al., 2015). The most important aspect of this education change is that of the teacher where the use of professional competence has often been mentioned as a key area that determines the excellence of learning. Qualified educators have always been held by the OECD and a wide range of later academic literature to play a significant role in the desired learning outcomes (Howells, 2018; Ghamrawi, 2022; Ghamrawi, 2023; Ghamrawi, Shal, and Ghamrawi, 2023). Additional studies have also revealed a strong correlation between education and the quality of the teacher and the way students perform, showing that effective teachers have a positive impact on student performance (Chu et al., 2015; Hanushek and Rivkin, 2006).

Quality education is determined by many factors like the content in the curriculum, classroom setting, and, most importantly, the abilities of the teaching staff. Many studies emphasize the central role of teachers in supporting or hindering the academic performance of students (Cherkasov et al., 2019a, 2019b; Fryer and Bovee, 2016; Hubackova and Semradova, 2016; Nortvig et al., 2018). Amid the fast growing United Arab Emirates (UAE) a country, the pursuit of educational reforms has been in line with the objective of promoting teacher professionalism by enforcing the national licensing system. Teaching license is a legal authorization that is necessary to pursue the teaching profession (Keller et al., 2016; Toktamysov et al., 2021). Effective execution of such licensing regime requires modification of international best practices and stringent provisions. Wiseman et al. (2017) argue

that teacher preparation has been pushed to the periphery of historical reforms focused on curriculum restructuring, homework policies, and standardized testing, which means that pre-service training programs have been structurally old-fashioned since the mid-20th century. In economic perspective, Brock and Ryan (2016) proposed a supply-demand model to explain the effects of licensing on the entry of teachers into the profession. The licensure exams are supposed to be used to distinguish between the competent and less competent applicants. Nevertheless, the process will inevitably cause a decrease in the total number of educators, with skilled and unskilled people being prevented by entry barriers (Nie et al., 2020). According to their model, without exams, the labor incentives cannot differentiate between high and low quality teachers. Hiking the pay of teachers, without quality checks, may amplify the number of skilled and unqualified people joining the profession.

In a comparative study of Arkansas, USA (Shuls and Trivitt, 2015), there were small variations in the performance outcomes between teachers who were licensed through the traditional and alternative pathways, but licensing exams had a degree of predictive reliability. Stricter licensing, which included the use of several examinations, in Los Angeles did not indicate significant relationships between the results of the tests and the effectiveness of teachers (Buddin and Zamarro, 2008). On the same note, Goldhaber et al. (2017) found some systematic errors in measuring licensing tests and therefore found them unsuitable in determining actual professional competence. Traditionally, the recruitment of teachers has been based on moral character rather than pedagogical skills with minimal uniformity in terms of the regions. The emergence of an academic rift between content and pedagogy was led to the inclusion of teacher education in liberal arts institutions (Goldhaber et al., 2017; Beketova et al., 2020). In the 1980s, alternative certification pathways emerged, which triggered the changes to more integrated, coherent teacher preparation models (Howell et al., 2016; Allington et al., 2017).

Teaching is more than a technique in the classroom and requires a complex of skills pedagogical, personal, and professional (Cowan & Goldhaber, 2016). The growing alarm regarding student achievement in the 1970s and 1980s stimulated the view to introduce teacher competency testing (Ahmad et al., 2019). According to Ali et al. (2022), a good teacher should be capable of showing a combination of knowledge, pedagogical expertise, emotional intelligence, and ethical conduct. Education teachers who do not possess these competencies cannot, in most cases, facilitate high quality of learning or development of students. The four dimensions in which professional teaching competence is grounded as recognized in the academic literature discuss include (1) instructional proficiency, (2) access to pedagogical tools and strategies (Burgener and Barth, 2018; Hakim, 2015; Nousiainen et al., 2018), (3) social and emotional capabilities (Adnan, 2018; Bliese et al., 2017; Espasa et al., 2018), and (4) ethical and value-based conduct. Researchers warn that even though social interactions are an indication of teacher characteristics, it is necessary to separate

personal likability and professional competence (Blomeke and Kaiser, 2017; Hakim, 2015; Zanella et al., 2017).

Even though the whole world has been working towards creating teacher licensing regimes as a way of checking the quality of education and professional accountability, in many developing areas such as Sindh in Pakistan, there are no uniform and well-developed teacher licensing regimes. Although in the international models special attention is paid to the strict competency-related tests and ongoing professional growth, the licensing policy that emerges in Sindh is still in its infancy. There is little empirical data on how the policy is aligned with global standards, effects of the policy on teacher professionalism, or how the policy is perceived by local teachers. In addition, the uneven distribution of licensing opportunities, in particular, in underserved regions, is another implementation problem. The lack of relative, contextualized research of the impact of teacher licensing on professional standards, quality of instruction, and equity in the system in Sindh forms a dire knowledge gap. This is a gap that needs to be filled to guide adaptive policy making and development of a better and more responsible teaching staff. Considering these factors, the current paper attempts to explore the topic of teacher licensing by focusing on it with a dual approach: the critical analysis of universal models of licensing and the analysis of the local experience of the recently implemented licensing system in Sindh. By predicting the perceptions of the teachers and the institutional preparedness in the Sindh and placing them in the global comparative contexts, the study will create evidence based informative on the implication of teacher licensing on professional standards and accountability. By so doing, it helps in the larger discussion of educational reform and teacher professionalism within developing contexts and provides policy relevant suggestions based on both the existing knowledge of the world and the specific situations on the ground.

Research Objectives

1. To investigate foreign examples and experience of teacher licensing and the way it affects the professionalism of teachers.
2. The aim of the study was to investigate the situation and views of teacher licensing in Sindh, Pakistan.
3. To examine the influence of teacher licensing on the professional standards, the quality of instruction and accountability in the educational environment of Sindh.
4. Comparison of the global and local perceptions with respect to teacher licensing and contextual policy and practice recommendations in Sindh.

Research Questions

1. What are the global patterns and trends in teacher licensing and what are the implications of the practices on international professionalism of teachers?
2. How do the stakeholders of teacher licensing in Sindh, Pakistan, practice and perceive them?
3. How important is the teacher licensing in the education system of Sindh in

terms of professional standards, instruction quality and accountability?

4. How does the perception of teacher licensing differ in the global and local of Sindh?

LITERATURE REVIEW

Global Models of Teacher Licensing

United States (Praxis Exam):

Was put in place by Educational Testing Services (ETS), the Praxis exams serve as a standardized admittance to teacher licensure and program entry in the U.S. the failure rates are significant, at 54 percent on first attempts in elementary subjects, and 25 percent never (Putnam & Walsh, 2019). Such statistics indicate that there are systemic issues, including the lack of preparatory assistance, low self-efficacy, and motivation (Goldhaber and Hansen, 2010; Petchauer, 2016, 2018). On top of this, there are still differences in pass rates between different racial groups, especially African American candidates. Although not all demographic predictors have been investigated (Arnold, 2021; Buzick, 2021), there is a knowledge gap on the effect of self-regulated learning (SRL) skills on the results of the tests (planning, goal setting, and self-assessment) (Panadero, 2017; Zheng, 2016; Zimmerman, 1989).

England (Qualified Teacher Status - QTS):

The Core Content Framework (CCF) suggested by the Department of Education is also used to regulate the framework of QTS in England to create the evidence-based standards of teacher training (DfE, 2019). The emphasis on experiential training and school-based training base and a structured and standardized curriculum provide the strength of the CCF (Mutton, Burn, and Menter, 2017; Hamis, 2025). Nevertheless, critics allege that the framework presents the process of teaching in a procedural manner, and it fails to consider context-specific realities (Hamid & Abbas, 2025; Knight and Sullivan, 2022). Others criticize its centralized and top-down application in which the other institutions must comply even though they may restrict autonomy in the institutions and marginalize pedagogical diversity (Newman, 2023; Helgetun and Menter, 2022). The framework has also been criticized to lack race, equity and systemic inequality (Rost et al., 2021).

UAE (Pilot Licensing Program):

The national teacher licensing program in the UAE began with a pilot program that involved over 600 teachers (Pennington, 2017a). The system has the framework on which the two examinations are conducted: one of them is conducted to check the pedagogical knowledge, and another one is conducted to check the subject-specific expertise. In event of failure, particular training and reconsideration occurs within two years (Pennington, 2017b). The UAE model of framework is modeled after the American and European models as it integrates the national, social mastery, and ethical practices values into the competency model (Aslanargun et al., 2015; Zanella et al., 2017). The perception of the UAE system by teachers is discussed in the paper, which serves to fill the gap in the scholarly literature related to the models of licensing used in the early stages in non-Western countries (Hamid & Awhinawhi,

2025; Hsu & Huynh, 2023).

The Sindh Licensing Framework: Policy and Implementation

There has been a history of issues in the educational system of Pakistan, in particular, the quality, recruitment, and retention of teachers (Tahira et al., 2020; Tareen et al., 2022). The formal licensing system is a relatively new development, despite the fact the existing pre-service training programs have determined certification systems (Gul & Hussain, 2016). To some extent as a response to the needs of greater professionalism and quality assurance, in May 2023, the Sindh province adopted the Sindh Teaching License Policy that would be an important step towards systemic reform (Ali and Ahmed, 2022; Tunio, 2023).

The concept of obligatory licensing is offered in this policy that is identified due to rigorous consideration of subject-area and pedagogical background knowledge (Hasan, 2023). It tries to ensure that the teachers uphold professional standards and produce a more competent and responsible teaching workforce (Javaid, 2023; Shah et al., 2025). The policy will also enhance the social and economic status of teachers, which will make the teaching profession more attractive to young and potential teachers (AKU, 2021). This is because competency-based entry requirements could greatly enhance teacher recruitment based on the outcome of higher student performance (Rizwan 2015; Masih et al., 2025). On January 28, 2024, another significant milestone of the Sindh licensing policy was achieved when 646 candidates successfully passed the exam as the first teacher licensure examination to be held in the province (AKU, 2024; Aurangzeb et al., 2024). The policy aims at not only raising the standards of teaching, although, the policy promotes a culture of accountability, perpetual enhancement and equity in the education sector. The Minister of Education of Sindh, Syed Sardar Ali Shah, has added that the policy is grounded on active approach to professional education of teachers, to produce more qualified and reputable teachers (AKU, 2023; Iqbal et al., 2021). Nevertheless, the policy implementation has identified the issue of access and equity. The rural/underserved teachers tend to have a barrier in accessing licensing centers and appropriate preparation, which reveals the inequity in the infrastructure of professional development (The Express Tribune, 2024).

Although numerous researches have been done to evaluate the original implementation of the Teaching License Policy in Sindh, most of them have been of descriptive nature or the administrative practices in the local setting. A superior difference exists between the comparative study of the structure of Sindh and other global models such as the ones applied in Finland, Singapore, or the United States. The ways in which the global standards of teacher competency and assessment can be applied in order to direct the emerging system in Sindh rarely ever engage with the existing studies. Second, there is no empirical study, particularly, of a qualitative or a mixed-methodology study on the procedural, institutional, and infrastructural aspects of the implementation of licensing in Sindh. The areas of concern on teacher readiness, support of institutions, and perception of policy fairness are poorly studied. Such gaps have to be filled in to make the licensing model contextually adaptive,

inclusive and sustainable and to come up with evidence based improvements.

Research Design

The research design used in this study was qualitative because it was aimed to understand the perception of education stakeholders towards teacher licensing process in Sindh and do a comparative study of the world models of teacher licensing. The phenomenological method was realized to reflect on the subjective experience of those who are directly involved in the processes of teacher licensing policies implementation and influence (Creswell, 2013; Moustakas, 1994). To bring out the contextual information and have a wider policy insight, document analysis of teaching license frameworks in the selected countries has also been used in the study. This qualitative design is characterized by multi-method as it provided both the depth of the qualitative research in terms of the interviews and the depth of the policy-level research in terms of reviewing the documents and deriving a comprehensive picture of the phenomenon of the licensing.

Selection of Countries and Justification

This research picked seven nations, Pakistan (Sindh), United States, Australia, United Kingdom, United Arab Emirates, Singapore, and Saudi Arabia, as they have different teacher licensing systems. The criterion of selection incorporated variation in licensing models (e.g. standardized exams, competency-based tests, portfolio tests), the extent of recognition of the licenses across geography, and the level of policy implementation maturity, with some systems such as the Sindh being new, and others such as the UK QTS being long-established. Diversity in culture and administration was deemed to constitute Anglo-American, Middle Eastern, and Asian context as well. This strategic sampling was useful in enabling useful comparisons and the discovery of pertinent information to guide and empower the changing teacher licensing policy in Sindh.

Population and Sampling

The sample to be used to conduct the interview phase consisted of education experts, policymakers, teacher trainers, and licensed teachers in the different districts of Sindh. The stakeholders were chosen because they are actively involved in the policy formulation, capacity development, implementation or evaluation of the teacher licensing systems. Participants who had relevant roles, experience, and insights were identified by using a purposive sampling strategy (Patton, 2015). The sample was limited to 11 people, which guaranteed the variety concerning profession, institutional affiliation and geographical representation. Such a size is consistent with the phenomenological standards of research, which is more focused on narratives about the context rather than generalizability (Creswell and Poth, 2018).

Data Collection Methods

Document Analysis

A document analysis was performed on official teacher licensing policy documents of the selected countries as a supplement and triangulate to the interview data. Such documents contained laws, system of licensing, and directives by official

agencies, manuals of implementation, and governmental reports. The analysis of documents gave a contextual foundation to cross-national comparison and aided in determining the intent and policy, structural aspects, and quality assurance systems (Bowen, 2009). This strategy was especially helpful to become familiar with differences in the eligibility requirements and assessment patterns, licensing renewal procedures, and professional growth needs.

Interviews

The data will be gathered using semi-structured interviews where the respondents will be free to express their point of view, but the research will still be consistent in its coverage on the major issues of interest (Kvale and Brinkmann, 2009). The interview guide had questions about the design, implementation, problems, and perceived consequences of the teacher licensing process. Participants were verbally interviewed and the records were transcribed word-to-word to facilitate analysis.

Data Analysis Techniques

Thematic analysis was applied to the data collected in the interview and documents to explore the aspects using the six phases of the six-phase framework introduced by Braun and Clarke (2006) familiarization, coding, theme development, theme review, theme definition, and report writing. Qualitative data were processed and coded with NVivo software, allowing to systematize them and guarantee the transparency of analytic choices. Interview themes were cross-tabulated with perspectives of the policy documents to create a good triangulated interpretation of the topic of teacher licensing between the local and international arena.

DATA ANALYSIS

Table 1 shows a comparative study of teacher licensing models in different contexts of the world, which identify important dimensions, including licensing authorities, eligibility provisions, assessments, and professional development provisions. This analysis will explore the patterns, strengths as well as areas of improvement in the teacher professionalization by reviewing teacher licensure systems in Sindh (Pakistan), the United States, Australia, the United Kingdom, the United Arab Emirates, Singapore, and Saudi Arabia. The comparison illuminates the way various countries are guaranteed of the quality of teaching, hold them accountable and contribute to the lifelong growth of the profession. The knowledge of these various models would be of great help to policy makers and teachers who intend to improve or develop effective teacher licensing systems.

Table 1: Comparative Analysis of Global Teacher License Models

Criteria/ Area	Sindh Teaching License Policy	USA (Praxis)	Australia (AITSL)	UK (QTS)	UAE (Teacher Licensing System)	Singapore (National Institute of Education - NIE)	Saudi Arabia (TAMHE EN Program)
Licensing Body	STEDA (Sindh)	ETS	AITSL	DfE	MoE UAE	NIE Singapore	Educatio n

	Teacher Education Development Authority)						Training Evaluation Commission (ETEC)
Purpose of License	Professionalization of teaching and ensuring quality education delivery	Certify readiness for teaching profession	Ensure professional teaching standards	Grant competency-based certification	Ensure minimum teaching standards	Foster future-ready, competent teachers	Standardize teaching quality
Eligibility Criteria	Bachelor's degree in education + passing teaching license test	Bachelor's + Praxis Test	Accredited Education Degree + Graduate Teaching Practice	Completion of ITT Programme	Bachelor's + Professional Licensing Test (PLT)	Bachelor's + Diploma in Education (Postgrad)	Bachelor's + Certification Exam
Assessment Method	Standardized test (subject + pedagogy) + situational judgment	Written Exams + Observations	Teaching Portfolio + Professional Experience Assessment	Skills Tests + Observations	Pedagogical and Content Knowledge Tests + Interviews	Coursework, Practicum, Exams	Written test + Assessment Interview
Testing Areas	Pedagogy, subject knowledge, educational policies	Pedagogy, Subject Knowledge, Literacy/Numeracy Skills	Professional Standards and Teaching Capability	Literacy, Numeracy, Teaching Practice	Pedagogy, Content Knowledge, Teaching Skills	Pedagogy, Curriculum Understanding	Content knowledge and pedagogy
License Levels	Tiered: Basic, Professional, Master levels proposed	Basic, Advanced Praxis Certificates	Provisional then Full Registration	QTS then NQT Induction Year	Competent, Proficient, Advanced Teacher	Licensed Teacher after Induction	Certified Educator
Renewal/Revalidation	Under development (linked to CPD hours)	CPD hours required for state re-licensing	Annual Professional Development Evidence	Induction + Ongoing CPD	Mandatory every 3-5 years with evidence	Regular upgrading programs	Mandatory renewal with PD evidence
Financial Incentives	Future provision proposed (promotion, increments)	Bonuses in some states	No direct incentives, but career advancement	Salary increases with service	Promotion eligibility	Scholarships for top-performing teachers	Career progression incentives
Professional Development Link	Strong link proposed (mandatory CPD)	CPD essential for re-licensure	CPD hours compulsory	Linked to Continuing Professional Development	CPD mandatory for renewal	Strong emphasis on continuous training	Compulsory professional development programs
International Recognition	Limited (local recognition only yet)	Recognized in USA and affiliated regions	Recognized across Oceania and Commonwealth	Highly recognized internationally	GCC recognition, growing internationally	Highly valued regionally and	Regional recognition across Gulf

			lth		nally	internatio nally	
--	--	--	-----	--	-------	---------------------	--

The licensing authorities differ greatly in their forms and independence among nations. The Sindh Teacher Education Development Authority (STEDA) is a provincial level scheme, which implies a fairly decentralized strategy. On the contrary, ETS (USA) and DfE (UK) are national organizations that have developed mechanisms and supervisory authority. It is noteworthy that the AITSL and NIE in Australia and the ETEC in Saudi Arabia are organizations in which licensing is institutionally integrated with teacher training and evaluative institutions under a nation development policy respectively. Ministry of Education in the UAE works in a similar manner still in a developing system. The model of Sindh is poorly developed, whereas others such as AITSL and DfE enjoy the decades of institutional maturity and systematization. The goal of licensing varies across all systems but the aims are to improve the level of teaching and professionalize the workforce. An example is Singapore and UAE which specifically aim to develop future-ready or globally competent educators, which combine national educational vision. However, Sindh and Saudi Arabia focus on standardization and accountability, which is a characteristic of systems in the stages of transformation. Licensing is integrated into strategic national education objectives (e.g. the concept of "future-readiness) of mature systems whereas in emerging systems, licensing is seen as more of a compliance measure.

Each system is an academic-professional nexus, as indicated in the entry requirements. The majority of the systems demand a Bachelor degree, usually with a teaching qualification (ex: diploma or induction). Singapore and Australia also have high barriers to entry that include integrated teacher training and practicum units. The eligibility in Sindh is more than a simple definition that does not have several levels of gatekeeping, including coursework or probation process in pedagogy. Such a system as Singapore uses the select and train model, and Sindh is still using the certify and allow model, which restricts the rigor of early screening. Evaluation approaches are very diverse. Sindh and Saudi Arabia are using standardized written exams which may not adequately measure classroom performance. In comparison, the portfolio based assessment of Australia and observation-based assessment of the UK are based on authentic and performance based evaluation. Singapore has a hybrid system, one that incorporates both coursework and practicum along with summative exams, which makes the triangulation of teacher capabilities possible. Lack of observational or practicum tests limits the range of the evaluation of the teaching dispositions and their practice in real-life. In all systems, pedagogical knowledge and content of subjects are evaluated, but on different levels. Singapore, the UK, and Australia comprise more areas such as curriculum knowledge, numeracy/literacy capabilities and instructional prowess, which can substantiate a competency-based assessment model. The fact that Sindh incorporates education policy knowledge is contextual yet can pay too much attention to theoretical knowledge and not practical skills. The structure of Sindh could use competency-

related assessment rubrics and addition of soft skills such as classroom management and reflective practice.

The tiered or staged licensing models are used in such systems as Sindh, USA, UAE, and Australia, providing an opportunity to develop professionally. The fidelity of such models however varies in the implementation. The tiered system of Sindh is still a proposal and restricts it in its practical value at the moment. Conversely, the single licensure that follows the induction period in Singapore is a manifestation of the holistic training-practice continuum. In as much as tiered systems allow career development, it should be accompanied with well-defined, quantifiable standards and integrated within policy framework, which remains unrealized in Sindh.UK, UAE, Australia, and Saudi Arabia Mandatory in connection with CPD evidence. The system of Sindh is in its formation and there are offers on implementation of CPD which is a good move but there is no clarity on how the system will be enforced and how quality will be guaranteed. The PD programs and constant upgrading of Singapore stands out due to its systematic incorporation of programs into teacher career progression. The quality of teaching during the renewal period can be maintained long-term thanks to regular, organized renewal based on actual CPD records and performance appraisals as it is in Australia and in the UAE. Sindh and some other systems (e.g. Australia) demonstrate either scanty or indirect financial rewards usually in career advancement or promotions. Contrary to that, Saudi Arabia and UAE have clear career-based rewards, whilst Singapore even has scholarships, which motivates the best entrants. Such monetary and non-monetary rewards are vital in attracting and retaining top quality professionals. The absence of apparent and direct monetary incentives might discourage the attractiveness of the license, especially among the most promising applicants.

The majority of systems combine licensing with compulsory continual professional development (CPD). The implementation mechanisms of CPD have not been institutionalized yet; Sindh suggests a strong connection between CPD, and these mechanisms include provider accreditation and monitoring. Australia, UAE, and Singapore have shown to be good examples of regulated PD ecosystems leading to relic ensure and career development. In the absence of quality assurance of CPD providers and activities, the licensing-PD connection will have little or no influence within Sindh.UK, Australia and Singapore are highly mobile globally and have mutual recognition agreements unlike Sindh whose license is at the local level. The licenses in the UAE and Saudi Arabia are becoming regional legitimacy in the GCC which is an indicator that cross-border portability issues are significant in contemporary teacher policy. Subsequent alignment with global systems (e.g., UNESCO ICT-CFT, INTA SC) could increase mobility, credibility and alignment with global standards of teachers.

Thematic Analysis of Policy Makers Interviews

Theme 1: Understanding of Teacher Licensing

Interviewees stressed that the process of licensing is transformative in the professionalization of teaching. In response, one of the respondents said, “licensing is

able to elevate teaching into a known profession; when evaluated to other professions such as medicine and law.” The pioneering status was another point, with one noting, “Sindh as the first province to introduce teacher licensing in Pakistan”. It was widely felt that licensing would mitigate the situation of teaching as a last resort career, “Licensing perceived to be the way to get out of teaching as a last resort career”. Another respondent was optimistic and said, “it will give us first mover advantage and make Sindh stand out in educational reform.”

These views are in line with the wider international discourse: the AITSL framework suggests that teaching in Australia is a registered profession with academic, ethical, and personal standards, and the TAMHEEN initiative on teaching in Saudi Arabia also suggests specific standards of competency to make teaching a prestigious profession.

Theme 2: Perception of the Sindh Licensing Framework

Teachers were very vague about the objectives of the framework first. One respondent confessed that, “teachers who were not sure of the intent and value of licensing. Transparency turned out to be a force”, gradually. One respondent wrote, “A third-party testing seems clear and equal”, and another one explained the situation by stating, “you only think that the exam is not biased, although the rest of the process is not clear”. One of them responded that the policy has indeed been made clear and structurally improved over time. This trend is supported by reviews of policy change in other arenas. The UK framework of iQTS, say, has undergone gradual reforms to enhance the process of assessment and induction, and thus continuous enhancement. Australia also recently redefined its registration framework (August 2024) to make sure that it is applied and transparent across states.

Theme 3: Impact of Licensing on Professional Behavior

Some of the respondents noted that there was a theoretical-practical disconnect: “There is a shortage of licensed teachers who are well versed in theory but practical classroom use.” One of them replied, “Theory is good, man, but you must coach me on classroom management”. The third one said, “we have learned the material, not how to use it with various students”. One of the respondents simply said, “we are paper teachers but the classroom speaks otherwise”. The same concern is expressed in the international structures. There are eight various teaching competencies in the UK Teachers Standards, that start with assessment and up to differentiated instruction. The Teacher Standards in Australia involve evidence of the continuous practice and induction phases to facilitate classroom preparedness. The UAE licensing system is equally inculcating the concept of continuous professional development as an effort to fortify practical competencies in its TELS standards.

Theme 4: Alignment with Global Standards

The participants characterized a mixed alignment. One of the teachers observed that, “in our framework, there is partiality with the global standards in that we are not very focused on practical implementation and performance”. A different one replied, “Standards such as QTS and AITSL are so specific in their rubrics; ours

must also be so specific". One of them stated, "we are going in the right direction, but we lack classroom observation cycles, which others require". One of the respondents proposed, "When their attention was on performance, it would have been another ballgame". These considerations are consistent with the global practices: QTS standards in the UK are very codified in terms of planning, assessment, and conduct. The Framework of Australia necessitates an observation and re-registration with the help of definite standards. The Singaporean NIE is also practicum-based programs that are closely tied with the outcomes of licensing, which is why they are aligned with professional competencies.

Theme 5: Implementation Challenges

Structural and systemic barriers were mentioned. One of the teachers complained, "Top-down government procedures slow down the incentive allocation". One more report stated, "Political forces come into play to disrupt the implementation". Inconsistencies were witnessed in the form of complaints "like delay in issuing teaching licenses and incentive making teachers frustrated". Questions of eligibility were also mixed up: "Thousands... 1 year B.Ed.... status is not clear". Moreover, private schools and teacher colleges were not in the spotlight: "The ignorance and indifference of the private institutions" and "No clear road to the privatized teacher trajectory. There were fears of rigid entry, "No flexible entrance to be TL holder" and "Disharmony of courses offered for 1.5 B.Ed.". Test anxiety was announced with such a statement: "Test phobia among teachers".

These issues are reflected on the international level. The centralized process of licensing in the UAE implies the renewal of the licenses and third-party verification but contains several stages of work and possible bottlenecks in the process. The review in Australia suggested that streamlining should be done to enhance mobility and to curb bureaucratic inconsistencies. The regulation of the UK provides an insulation of the licensing process by independent institutions such as Teaching Regulation Agency and consistency in the pathing of all cadres.

Theme 6: Potential Benefits of Licensing Framework

It was also made clear by the respondents that licensing improves the quality of teachers entering as well as across the profession. One said, "teaching license must be incorporated during the recruitment as opposed to promotions". The other one, which was offered, was the, "License as a qualification standard for future teaching candidates". One of the third, "It establishes a plausible foundation". Lastly, "It standardizes expectations and results". Similarities on the international level cannot be underestimated: The UAE correlates licensure with recruitment and retention requirements with its education system. The standards of AITSL in Australia focus on continuous professional development, relevance and renewal. In Singapore, certification is mandatory in the recruitment process and licensure is connected to professional preparation and improvement.

Theme 7: Recommendations for International Recognition.

Interviewees proposed tactical solutions: "Publicize licensing system in every province to develop one front line". Make efforts in world education conferences

and through alliances via “Showcase Sindh. Make sure that all the certified teachers are granted licenses prior to international promotion”. Map B.Ed. curriculum international licensing requirements”. Another collaboration that has been mentioned: "Collaboration with international Certification awarding Organizations”.

These are consistent with the current practices: the NIE in Singapore is actively involved in the international consultancy and does not hesitate to promote its standards on the international scale. The cross jurisdictional licensing based on AITSL standards is made possible by the mutual recognition in Australia. UK has revised the QTS frameworks to accommodate foreign teachers according to the equivalence of professionalism.

Theme 8: Final Suggestions

Final points of the respondents were on being proactive and visible. One of them argued, “Sindh has to be marketed by the ministry and educational leaders who are eager to market the success of the licensing in Sindh all over the world”. The other one claimed, "Get global opinions of partners such as UNICEF and JICA”. Another comment encouraged: "Take the success of Sindh in licensing as a conference case study”. and one of them said, "Credibility can be improved by way of external audits.” This is similar to the international practices: the QTS framework in the UK is constantly inspected by the Teaching Regulation Agency and Ofsted. Education ministries continuously review the registration of Australia. The NIE in Singapore is globally benchmarked and takes part in global education fora, which helps to strengthen credibility and enhance improvement.

CONCLUSION

This discussion integrates qualitative information and global policy standards. In each theme, Sindh is experiencing the potential of a new licensing framework, which has structural, feasible, and perception problems. Experiences of rigorous systems in Australia, the UK, UAE, Singapore and Saudi Arabia demonstrate the necessity of equal theoretical and practical evaluation, lean governance, inclusive policy development and global targeting as a strategy to take Sindh licensing toward being a professional excellence instrument.

RESULTS AND DISCUSSION

The present study used the six-step thematic analysis of Braun and Clarke (2006), supported by NVivo to perform a systematic coding process and achieve transparency. The combination of interview and policy document data presented a full picture of not only the perception of the practitioners but also policy design, which is supported by specialists in the field of qualitative research in education (Clarke and Braun, 2023). In line with the earlier studies (Ryan, 2024), the respondents perceived licensing as an act of professionalization-this is similar to the attitudes held in Australia and Saudi Arabia where standards systems (AITSL; TAMHEEN) have raised the stature of teaching. The observation that licensing brings teaching to an understood occupation; relative to such professions as medicine

and law, conforms to global evidence that licensing improves teacher identity and talent draw (OECD, 2023).

Nevertheless, as in the UAE and UK (Johnson & Smith, 2024), there was a gap of clarity at the beginning of the Sindh framework. Teachers replied, "Teachers who were not initially certain of the purpose and benefits of licensing, but said they were becoming more transparent with time. Although the UK policy has effectively integrated feedback loops in the post-launch phase (DfE, 2022), Sindh continues to perfect its framework and ensure its efficient communication. The theory-practice gap that has continually existed is also harmlessly reflected in the literature (Kumar & Lee, 2025). Respondents noted that there is a deficiency of licensed teachers who are good in theory but applied in the classroom in a practical manner. This follows the general world research, which recommends combined practicum and mentoring (Darling-Hammond, 2022). An example is the Singaporean NIE where developmental support is paid a lot of attention during the induction process, which Sindh can emulate.

Conformity to international standards is not complete. Educators said that Sindh model gives minimal attention to practical implementation and performance as opposed to well laid down rubrics in QTS and AITSL. Comparative studies verify this point of view as practice-oriented assessment is correlated with teacher effectiveness (European Commission, 2024). Systemic constraints of the implementation process (like bureaucratic delays, political interference, and unclear eligibility) are similar to those in other developing settings (Almalki and Seddiqi, 2023). The particularly discouraging aspect was delays in the issue of licenses and incentives: "Delays in the issuance of teaching licenses and incentives frustrate the teachers (Dawn, 2024; Nation, 2024). Administrative implementation is therefore imperative in order to keep the teachers motivated in a timely manner. Lastly, career-linked licensing that was recommended in the study was confirmed. Teachers considered certification as the basis of recruitment and advancement- as observed in Singapore and UAE, where license status is directly related to hiring and advancement (Ministry of Education, UAE, 2023).

CONCLUSION

The present research, which is based on the systematic thematic analysis, validates the potential and the difficulties of the emerging licensing system in Sindh. As much as it aids in professional identity and matchability to the global discourse, inconsistency in application integration, communication and administrative effectiveness undermine its potential. Through the use of structured observations, strong support systems, and global strategic interactions, Sindh will be able to develop its licensing policy to promote high-quality teacher professionalization based on equity, accountability, and international relevance.

Recommendations

Integration of Practical Assessment and Induction into Licensing

The Government of Sindh ought to integrate formal practicum based review

and classroom observations in teacher licensing. This would make sure that newly licensed teachers are not merely tested about theoretical material, but how well they can use the pedagogical skills in a real classroom situation. Structured mentoring schemes at the induction stage, as in the case of the UK Early Career Framework or NIE model in Singapore would also help in facilitating professional preparedness and classroom effectiveness.

Strengthening of Clarity and Public Communication Regarding Licensing

The intent, design, advantages, and direction of the licensing system should be well-communicated to the respective stakeholders by STEDA and other concerned authorities. Awareness seminars should be held, frequent updates to the policy, and briefings of the stakeholders should be done to minimize confusion among the educators in the society and the private sector. It would also help to increase transparency by publishing common questions (FAQs), the eligibility criteria, and application processes via official platforms.

Streamlining of Administrative Processes and Timely Provision of Incentives.

A centralized online portal of STEDA should handle the licensing process and provide schedules on application, disseminating results, and issuing the license. STEDA is supposed to make sure that all qualified licensed instructors are given after certification the proposed financial allowance within a specified time. Such incentives would be timely and this would improve the motivation and professional worth of the license.

Alignment of Pre-Service Curriculum with International Competency Frameworks

Sindh education departments and higher education institutions ought to consider and make changes to the B.Ed. and M.Ed. programs in order to conform to the international standards like AITSL (Australia), QTS (UK) and NIE (Singapore). Such alignment must not only entail the affiliation of subject and pedagogical content but also major competencies like assessment literacy, reflective practice, digital pedagogy, and ethical professionalism.

Institutionalization of Continuous Professional Development (CPD)

The licensing system must have an enforceable and regulated CPD prerequisite of renewing a license. STEDA must require a minimum amount of CPD credit hours within a specified licensing time frame (e.g. five years) and will need to put in place a process of accrediting CPD providers. The teachers who are licensed must be expected to have the professional learning portfolio that explains their development that must be periodically verified.

Promotion of International Visibility and Peer Validation

International visibility involves promoting the product as a globally popular brand among other brands in a specific market segment. International Visibility and Peer Validation: International Visibility: International visibility refers to marketing the product as a globally sold brand amongst other brands within a given market segment.

Through active participation in Sindh teacher licensing framework within international platforms including UNESCO Teacher Taskforce conferences, Global

Education Summit and collaboration with other organizations like UNICEF and JICA, STEDA and the Ministry of Education should take the initiative to popularize Sindh teacher licensing framework internationally. The framework can be enhanced by inviting the attention of international education agencies to conduct the reviews of the framework and offer directions on how the model can be improved to ensure that the framework remains credible.

REFERENCES

- Abdallah, A. K., & Musah, M. B. (2021). Effects of teacher licensing on educators' professionalism: UAE case in local perception. *Heliyon*, 7(11), e08348. <https://doi.org/10.1016/j.heliyon.2021.e08348>
- Aurangzeb, M., Uddin, S. S., Irfan, M., Aziz, Z., & Iqitdar, A. (2024). Cyber Warfare and National Security: Analyzing the Evolving US-China Cyber Rivalry through the Lens of Realism and Its Implications for Global Cyber security Governance. *Journal of Political Stability Archive*, 2(4), 293-303.
- Australian Institute for Teaching and School Leadership (AITSL). (n.d.). *National review of teacher registration*. <https://www.aitsl.edu.au/teach/national-review-of-teacher-registration>
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27–40.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Brock, A., & Ryan, T. (2016). Exploring the gap between teacher certification and permanent employment in Ontario: An integrative literature review. *Canadian Journal of Educational Administration and Policy*, 175, 1–28.
- Christie, D., & Menter, I. (2009). Research capacity building in teacher education: Scottish collaborative approaches. *Journal of Education for Teaching*, 35(4), 337–354. <https://doi.org/10.1080/02607470903220414>
- Chu, J. H., Loyalka, P., Chu, J., Qu, Q., Shi, Y., & Li, G. (2015). The impact of teacher credentials on student achievement in China. *China Economic Review*, 36, 14–24.
- Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). SAGE Publications.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications.
- Darling-Hammond, L. (2022). *Preparing teachers for the future: Lessons from global best practice*. OECD Publishing.
- Dawn. (2024, July 19). Teaching license. *Dawn*.
- Denzin, N. K. (2012). Triangulation 2.0. *Journal of Mixed Methods Research*, 6(2), 80–88.
- Department for Education (DfE). (2019). *Initial teacher training core content framework*. DfE.
- Department for Education (DfE). (2021). *Government response to the Initial Teacher*

- Training (ITT) market review report.* DfE.
- European Commission. (2024). *Effective teacher evaluation: A cross-national study.*
- Ghamrawi, N. (2010). No teacher left behind: Subject leadership that promotes teacher leadership. *Educational Management Administration & Leadership, 38*, 304–320.
- Ghamrawi, N. (2011). Trust me: Your school can be better—A message from teachers to principals. *Educational Management Administration & Leadership, 39*, 333–348.
- Ghamrawi, N. (2013). In principle, it is not only the principal! Teacher leadership architecture in schools. *International Education Studies, 6*, 148–159.
- Ghamrawi, N. (2022). Teachers’ virtual communities of practice: A strong response in times of crisis or just another fad? *Education and Information Technologies, 27*, 5889–5915.
- Ghamrawi, N. (2023). Toward agenda 2030 in education: Policies and practices for effective school leadership. *Educational Research for Policy and Practice, 22*, 325–347.
- Ghamrawi, N., Shal, T., & Ghamrawi, N. A. (2023). The rise and fall of teacher leadership: A post-pandemic phenomenological study. *Leadership and Policy in Schools, 22*, 1–16.
- Goldhaber, D., Gratz, T., & Theobald, R. (2017). What's in a teacher test? Assessing the relationship between teacher licensure test scores and student STEM achievement and course-taking. *Economics of Education Review, 61*, 112–129.
- Hamid, S. (2025). A Critical Review of Educational Research Methodologies: Approaches, Applications, and Implications. *Pakistan Social Sciences Review, 9*(2), 138-150.
- Hamid, S., & Abbas, S. (2025). Women’s Roles in Education and Social Welfare Development: Insights from a Qualitative Study. *Women, Education, and Social Welfare, 2*(2), 63-71.
- Hamid, S., & Awhinawhi, A. (2025). From isolation to interaction: The role of language and digital communication tools in empowering adolescent virtual collaboration. *Language, Technology, and Social Media, 3*(2), 199-213.
- Hanushek, E. A., & Rivkin, S. G. (2006). Teacher quality. In E. A. Hanushek & F. Welch (Eds.), *Handbook of the economics of education* (Vol. 2, pp. 1051–1078). Elsevier.
- Harrison, R., Meyer, L., Rawstorne, P., Razee, H., Chitkara, U., Mears, S., & Balasooriya, C. (2020). Evaluating and enhancing quality in higher education teaching practice: A meta-review. *Studies in Higher Education, 47*, 80–96.
- Helgetun, J. B., & Menter, I. (2022). From an age of measurement to an evidence era? Policy-making in teacher education in England. *Journal of Education Policy, 37*(1), 88–105. <https://doi.org/10.1080/02680939.2020.1748722>
- Hill, J. (2023). Reuben Moore, National Institute of Teaching. *Schools Week*. <https://schoolsweek.co.uk/reuben-moore-executive-director-national->

[institute-of-teaching/](#)

- Hofmarcher, T. (2021). The effect of education on poverty: A European perspective. *Economics of Education Review*, *83*, 102124.
- Hordern, J., & Brooks, C. (2023). The Core Content Framework and the ‘new science’ of educational research. *Oxford Review of Education*. <https://doi.org/10.1080/03054985.2023.2182768>
- Howells, K. (2018). *The future of education and skills: Education 2030: The future we want*. OECD.
- Hsu, W. K., & Huynh, N. T. (2023). An evaluation of productive efficiency for container terminals affiliated to a single organisation. *Journal of Transport Economics and Policy (JTPE)*, *57*(1), 59-76.
- Iqbal, U. B., Sarmad, M., Hussain, S., & Jalil, A. (2021). Analyzing Project Organizational Culture through Workplace Incivility and Ostracism under Mediating and Moderating Mechanisms. *Ilkogretim Online*, *20*(4).
- Johnson, R., & Smith, K. (2024). The evolution of teacher licensing in the UK and UAE. *Journal of Education Policy*, *39*(4), 567–585.
- Keller, C., Al-Hendawi, M., & Abuelhassan, H. (2016). Special education teacher preparation landscape: Gulf Cooperation Council countries. *Teacher Education and Special Education*, *39*(3), 191–193.
- Knight, R., & Sullivan, S. (2022). Developing a framework for initial teacher education: Route map or reflective tool? *Journal of Education for Teaching*, *48*(2), 146–158. <https://doi.org/10.1080/02607476.2021.1985938>
- Kumar, P., & Lee, J. (2025). Bridging theory and practice in teacher licensing: A global review. *International Journal of Teacher Education*, *27*(1), 12–29.
- Kvale, S., & Brinkmann, S. (2009). *Interviews: Learning the craft of qualitative research interviewing* (2nd ed.). SAGE Publications.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. SAGE Publications.
- Masih, S., Kumar, V., Tan Huynh, N., Anh Kiet, V., & Thi Thom, N. (2025). Bridging the AI learning anxiety and employees’ extra-role behavior: An LMX perspective. *EDPACS*, 1-15.
- Ministry of Education, UAE. (2023). *Teacher licensing framework manual*. UAE Government.
- Mokhtari, K., Yellin, D., Bull, K., & Montgomery, D. (1996). Portfolio assessment in teacher education: Impact on preservice teachers' knowledge and attitudes. *Journal of Teacher Education*, *47*(4), 245–252. <https://doi.org/10.1177/0022487196474002>
- Moustakas, C. (1994). *Phenomenological research methods*. SAGE Publications.
- Moynihan, D. (2022). Why does the system need a National Institute of Teaching? *Schools Week*. <https://schoolsweek.co.uk/why-does-the-system-need-a-national-institute-of-teaching/>
- Mutton, T., Burn, K., & Menter, I. (2017). Deconstructing the Carter Review: Competing conceptions of quality in England’s ‘school-led’ system of initial teacher education. *Journal of Education Policy*, *32*(1), 14–33.

<https://doi.org/10.1080/02680939.2016.1214751>

- Nation. (2024, July 30). Tall claims but zero progress. *The Nation*.
- Newman, S. (2023). What works in initial teacher education? *Journal of Education for Teaching*, 49(5), 747–752. <https://doi.org/10.1080/02607476.2023.2269757>
- Nie, D., Panfilova, E., Samusenkov, V., & Mikhaylov, A. (2020). E-learning financing models in Russia for sustainable development. *Sustainability*, 12(11), 4412.
- OECD. (2023). *Trends in international teacher policy*. OECD.
- Patrinos, H. A., & Psacharopoulos, G. (2020). Returns to education in developing countries. In S. Bradley & C. Green (Eds.), *The economics of education* (pp. 53–64). Academic Press.
- Patton, M. Q. (2015). *Qualitative research and evaluation methods* (4th ed.). SAGE Publications.
- Pennington, R. (2017a). The new UAE teacher license scheme explained. *The National*. <https://www.thenationalnews.com/uae/education/the-new-uae-teacher-licence-scheme-explained-1.18039>
- Rost, A. O., Sinclair, Y., & Warner, D. (2021). We need to call race by its name in teacher education. *British Educational Research Association (BERA)*. <https://www.bera.ac.uk/blog/we-need-to-call-race-by-its-name-in-teacher-education>
- Shah, S. M. A., Ahmed, N., Haq, A. U., & Saba, S. (2025). Leadership for Innovation: Fostering the Culture of Creativity in Organization: A Systematic Literature Review. *Journal of Asian Development Studies*, 14(2), 945-957.
- Shuls, J. V., & Trivitt, J. R. (2015). Teacher effectiveness: An analysis of licensure screens. *Education Policy*, 29(4), 645–675.
- Stacey, M., Talbot, D., Buchanan, J., & Mayer, D. (2019). The development of an Australian teacher performance assessment: Lessons from the international literature. *Asia-Pacific Journal of Teacher Education*, 48(5), 508–519. <https://doi.org/10.1080/1359866X.2019.1669137>
- STEDA. (2023). *Teaching license policy, Sindh 2023*. Government of Sindh.
- STEDA. (2025). *Notification on teaching license allowance*. Government of Sindh.
- Tanjung, E. F. (2020). Impact of public wellness, competitiveness, and government effectiveness on quality of education in Asian countries. *Cypriot Journal of Educational Sciences*, 15, 1720–1731.
- Toktamysov, S., Berestova, A., Israfilov, N., Truntsevsky, Y., & Korzhuev, A. (2021). Empowerment or limitation of the teachers' rights and abilities in the prevailing digital environment. *International Journal of Emerging Technologies in Learning*, 16(2), 205–219.
- Wiseman, A. W., Davidson, P. M., & Brereton, J. P. (2017). Teacher quality in Gulf Cooperation Council (GCC) countries. In J. Loughran & M. Loughran (Eds.), *International handbook of teacher quality and policy* (pp. 218–237). Routledge.