



Article

# Teaching Licensure and Education Quality: Teachers' Perceptions

Norma Ghamrawi 1,\* D, Abdullah Abu-Tineh 1 and Tarek Shal 2

- Department of Educational Sciences, College of Education, Qatar University, Doha 2713, Qatar
- <sup>2</sup> Social & Economic Survey Institute (SESRI), Qatar University, Doha 2713, Qatar
- \* Correspondence: norma.g@qu.edu.qa

Abstract: This study surveyed 1008 teachers from K–12 public schools in Qatar regarding a performance-based teaching licensure that replaced its portfolio-based licensure. The survey, which was validated using an exploratory factor analysis (EFA), consisted of four domains: (1) Clarity of licensure procedures; (2) The perceived educational value of the license; (3) Personal gains from the license; and (4) Teachers' recommendations for improving the licensure. Findings revealed a complex interplay of views, wherein teachers acknowledged the clarity of the licensure protocols and recognized their potential benefits for education quality. However, there remained a disconnect when it came to perceiving the protocols' direct impact on the teachers' own professional growth. These insights serve as valuable resources for policymakers and stakeholders, emphasizing the importance of aligning licensure policies with teachers' needs and aspirations. Ultimately, the study underscores the significance of continuous dialogue and reflection to shape a more effective and meaningful teaching licensure framework. It contributes to the global discourse surrounding teaching licensure, accentuating the paramount significance of fostering continuous dialogue and introspection in crafting an efficacious and resonant licensure framework.

Keywords: teacher education; education quality; teaching licensure; teacher professional growth



Citation: Ghamrawi, N.; Abu-Tineh, A.; Shal, T. Teaching Licensure and Education Quality: Teachers' Perceptions. *Sustainability* **2023**, *15*, 10886. https://doi.org/10.3390/ su151410886

Academic Editor: Grigorios L. Kyriakopoulos

Received: 23 June 2023 Revised: 9 July 2023 Accepted: 10 July 2023 Published: 11 July 2023



Copyright: © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

# 1. Introduction

The significance of quality education as a catalyst for human, social, and economic development has been widely acknowledged [1]. Research has shown a positive correlation between a country's level of development and the quality of its education system [2,3]. Furthermore, when combined with other reform efforts, quality education has the potential to empower students to escape poverty [4]. Highly qualified teachers play a crucial role in achieving quality education, as highlighted by the OECD [5] and many other studies in the literature [6–11]. Studies by [12,13] have demonstrated the link between teacher quality and student achievement, with qualified teachers contributing significantly to students' learning outcomes.

In light of these findings, many countries have implemented initiatives to enhance the quality of teacher education programs and professionalize the teaching profession [14–17]. One method for professionalizing teaching is the adoption of teaching licensure [18]. Teaching licensure ensures adherence to established standards and validates teachers' capacity to improve student learning outcomes [19,20]. It also serves as a safeguard against the inclusion and persistence of unqualified teachers in the profession [21] while providing ongoing learning and growth opportunities for teachers to enhance their pedagogical knowledge and autonomy [19,22].

Teaching licensure requirements exhibit notable variations across different regions, reflecting the distinctive educational frameworks and priorities prevalent in each locale. In the United States, for instance, aspiring educators typically undertake a four-year undergraduate program in education or a related discipline, followed by enrollment in

Sustainability **2023**, 15, 10886 2 of 16

a state-endorsed teacher preparation program. Subsequently, candidates must successfully pass licensing examinations and satisfy specific classroom experience prerequisites [23]. By contrast, countries such as Finland prioritize teacher training at the postgraduate level, fostering a deep focus on scholarly inquiry and practical exposure. In Finland, prospective teachers undergo a rigorous selection process and receive extensive training encompassing pedagogical mastery [24,25]. In certain parts of Asia, such as South Korea, attaining teaching licensure necessitates the completion of a bachelor's degree in education, followed by success in a national examination [26]. These regions often place substantial emphasis on standardized testing and scholastic achievement. Irrespective of the geographical context, the ultimate aim of teaching licensure is to ensure that educators possess the requisite knowledge and aptitude to effectively educate and support students within their respective educational frameworks [19,20].

In Qatar, the teaching licensing and certification system was introduced in 2007 as part of the educational reform agenda known as "Education for a New Era" [27,28]. Although the broader reform initiative was discontinued nearly a decade later [27], the teaching licensure protocol remained an integral part of Qatar's teaching professionalism framework. However, there have been significant changes in the teaching licensure model in Qatar, with a temporary freeze period in between [29]. The original portfolio-based licensure model, which was initiated in 2008, was halted in 2015 due to opposition from the Qatari educational community, media coverage, and perceived incompatibility with local educational context and ideology [30]. In 2017, the Ministry of Education and Higher Education (MOEHE) reintroduced teaching licensure but shifted to a new performance-based certification model.

It is noteworthy that the shift from one licensure model to another occurred without any published studies conducted by the MOEHE. While teachers played a significant role in discontinuing the portfolio-based licensure, their perspectives were not explored in any published works by the MOEHE [29]. Similarly, the MOEHE did not publish any studies examining teachers' views on the adoption of the performance-based model. As the newly implemented model has been in place for nearly three years, it is crucial to investigate teachers' perspectives and assess the extent to which it is achieving its objectives of enhancing the quality of teaching practices, as perceived by the teachers themselves.

## 2. Purpose of the Study

The teaching licensure system in Qatar has undergone significant changes since its inception almost 15 years ago. It has encountered resistance, experienced interruptions, and transitioned from a portfolio-based licensure to a performance-based licensure model. Unfortunately, there is a lack of evidence indicating that teachers' perspectives were considered by policymakers during this shift between models [29]. Furthermore, very few studies in the literature have examined teachers' perceptions of the portfolio-based licensure [29,31]. Therefore, the objective of this study is to gather teachers' perceptions, criticisms, and recommendations regarding the recently implemented performance-based teaching licensure. As such, the study was guided by the following research questions:

- (1) To what extent do teachers believe that the teaching licensure procedures are clear?
- (2) What is the educational value foreseen by teachers regarding the teaching license?
- (3) What are the personal gains of teachers earned from the teaching licensure, as seen through their own lenses?
- (4) What are the recommendations of teachers regarding the teaching licensure?

## 3. Importance of the Study

This study holds significant value both at the local and international levels. Locally, it provides valuable insights for policymakers by highlighting teachers' perspectives on the newly implemented teaching licensure model. These empirical data allow policymakers to better understand teachers' voices and opinions regarding the teaching licensure, thereby supporting efforts to enhance the quality of education. The study offers firsthand informa-

Sustainability **2023**, 15, 10886 3 of 16

tion on how teachers perceive the educational value of the teaching license, the clarity of its procedures, and the personal benefits they perceive from it.

On an international scale, this study contributes to the understanding of teachers' perspectives on teaching licensure, particularly in the context of a transition from a portfolio-based model to a performance-based model. It also explores the influence of non-contextual professional standards on teachers' perceptions and evaluations of licensure schemes. Researchers interested in educational reform initiatives will find value in this study as it sheds light on the underlying factors that both support and hinder the implementation of such initiatives.

Furthermore, the teaching licensure is a contentious issue that attracts numerous critiques, often due to politically motivated standards and the disputed impact on the quality of public teaching. This study adds to the debate by examining the implications of its findings within the Qatari context and placing them in the broader global discussion on teacher licensing.

# 4. Literature Review

# 4.1. Standards for Teacher Quality

Teacher quality has been a major focus of educational research, with studies exploring various factors that contribute to high-quality teaching [32,33]. While some research initially suggested a correlation between experience and teacher quality, further studies have shown that there are novice teachers who outperform their more experienced counterparts [34,35].

Researchers have identified key aspects that define high-quality teachers and serve as indicators of their teaching prowess. These include mastery of the content being taught, proficiency in content pedagogy, ability to motivate students, and effective management of the educational environment [34]. These aspects, along with others that characterize high-quality teaching, are often encapsulated in professional standards. These standards provide a common framework and shared language within the educational community for assessing and planning activities aimed at achieving quality [35,36]. Professional standards serve as a reference point for evaluating teacher quality and guiding professional development initiatives [20].

However, there is an ongoing debate in the literature regarding the nature of professional standards, whether they are primarily developmental or regulatory in nature [29]. Some argue that standards support teacher development by clarifying processes and expectations, including Frode et al., 2016, as cited in [29]. Others contend that standards impose control on teachers, limiting flexibility and creativity by dictating what they should or should not do [37]. A third perspective suggests that professional standards can enhance teacher quality if they are used within a culture of understanding, where educators grasp the purpose and significance of these standards [38].

# 4.2. The Polarized Discourse on Teaching Licensure and Quality

The literature surrounding teaching licensure presents a polarizing discourse, with conflicting views on its impact on education quality [39]. Some argue for the importance of licensure as a means to ensure high standards and exclude low-quality candidates from the teaching profession, including Darling–Hammond, 1997, as cited in [40]. However, others claim that licensure has no effect on teaching quality [41].

Several studies suggest that teacher licensing does have some predictive power in terms of teacher performance in the classroom [42]. These studies argue that licensed teachers possess the necessary knowledge, skills, and competencies to effectively teach and, thus, contribute to education [34]. For instance, ref. [43] determined that teaching licensure test scores were either moderately or highly predictive of student learning gains.

However, ref. [44], in an extensive examination of published and unpublished work on teacher licensure, cited by prominent advocates of licensure, concluded that such research had limitations and was unreliable for making judgments. Similarly, a long-term and large-scale study by [45] determined that student achievement was independent of teachers being

Sustainability **2023**, 15, 10886 4 of 16

licensed or not. Sharkey and Goldhaber, as cited in [29], arrived at a similar conclusion, stating that the impact of teaching licensure on student outcomes is inconclusive.

From a different perspective, studies by [46–48] highlight that teaching licensure should be viewed as a process that positively influences teachers' values and self-efficacy, rather than merely an end goal. Ref. [48] suggests that teachers should perceive value in the licensure rather than viewing it as a threat to their careers. Additionally, studies such as ref. [47,49] establish a connection between effective licensure systems and increased levels of teacher efficacy.

A study conducted by [50] examined the impact of teacher licensure in the Gulf Cooperation Countries (GCC). The study explored the relationship between licensing teachers and its effect on student achievement and teacher performance. The findings indicated that there was no direct or consistent association between teacher licensure and student achievement outcomes.

A potential compromise is to consider teaching licensure as a means of ensuring a basic level of quality among teachers, enabling them to fulfill their essential classroom responsibilities with minimal success [34]. It guarantees that licensed teachers are capable of managing basic classroom routines [15].

# 4.3. The Teaching Licensure in Qatar: Past and Present

The introduction of the "Education for a New Era" initiative in Qatar in 2004 emphasized the importance of professional standards in education reform [28]. However, there has been criticism that these standards were imported from Western countries without considering their applicability to the Qatari educational context [28,51].

The licensure process in Qatar involves three levels: entry, proficient, and advanced [29]. Teachers must submit their degrees for initial verification to receive a provisional license, and for a proficient level license, teachers collect artifacts from their teaching practice aligned with the national professional standards (QNPSTSL) [29]. The artifacts are compiled into a portfolio, which is evaluated by an Attestation Committee composed of school members and trained coaches (Ellili–Cherif et al., 2012) [30]. The committee's recommendation is then submitted to the Professional Licensure Office (PLO) for final approval [29].

Studies conducted in Qatar have raised concerns about the portfolio-based licensure system [29,30,51]. Teachers did not perceive value in the professional standards and felt that the focus on licensure and standards detracted from more important aspects of teaching [51]. As a result, media pressure led to a shift from portfolio-based licensure to a performance-based scheme, which involves observing teachers in the classroom [30]. The performance-based licensure has three levels: training, classroom observations, and assessments (MOEHE website).

This study aims to investigate teachers' perspectives on the newly adopted performance-based teaching licensure, as no previous studies have explored this topic.

#### 5. Methodology

#### 5.1. Research Design

This study was quantitative in nature, aiming to survey teachers' views pertaining to the newly adopted performance-based teaching license in the state of Qatar. It used a survey as a research instrument and deployed it to a target of 1000 (7% of the overall public school teacher population in Qatar https://www.edu.gov.qa/Documents/HigherEdTracks/Annual%20Statistics%202020-2021\_%20%D9%85%D8%B9%D8%AA%D9%85%D8%AF[2083].pdf, accessed on 15 November 2023) public school teachers randomly selected from all grade levels.

# 5.2. The Sample

Participants in this study were randomly selected from the gross population of teachers in public schools in Qatar. The survey was developed using Google Forms, and the link was sent to all possible WhatsApp groups of teachers known to the researchers, colleagues,

Sustainability **2023**, 15, 10886 5 of 16

and school principals. As the aim was to collect the views of 1000 teachers, the survey was closed when 1008 anonymous participants responded within just one month since its launch.

WhatsApp groups are very popular in the state of Qatar, as means for communication within and between schools. Most of these groups were established during the pandemic to facilitate communication. However, following the pandemic, WhatsApp groups continue to be used officially by school principals. The easiest and quickest way to reach all teachers is via those groups.

The demographic characteristics of the sample are presented in Table 1.

**Table 1.** Demographic characteristics of the sample.

Item	% (Rounded Figures)
Gender	
Male	40%
Female	60%
Age (Years)	
Less than 25	21%
26–35	36%
36–45	37%
46 and above	6%
Experience (Years)	
Less than 4	1%
5–9	13%
10–14	24%
15–19	20%
20 and above	19%
Job Title	
Teacher	85%
Subject Coordinator	15%

Table 1 shows that the sample was predominated by females (60%), with the majority of participants being [26–45] years old. Moreover, the greatest percentage of participants' years of experience was above 10 years. Finally, the sample was all teachers, with 15% taking over the role of the subject coordinator besides their teaching role.

#### 5.3. The Survey Instrument

The development of the survey in this study followed a two-phase process, as outlined by [52]: the development phase and the validation phase. In the development phase, qualitative methods were employed to create the survey items. The researchers conducted a thorough review of the literature, focusing on constructs related to teaching licensure in Qatar and other countries, as well as how these constructs were measured in previous surveys. The literature highlighted issues such as the lack of clarity in licensure procedures, teachers' limited understanding of the educational value and personal benefits of the license, and suggestions for improvement. Based on these findings, survey items were developed under these themes, along with a section for demographic information.

To ensure content validity, two expert reviewers familiar with the topic were engaged in reviewing the survey. Their feedback led to several modifications, including shortening the survey instructions, clarifying ambiguous terms, removing redundant items, and rearranging some items. As a result, the initial set of 54 items was reduced to 46 items.

The final survey instrument consisted of five sections: a demographic data section and four thematic sections. Section 1 assessed the clarity of teaching licensure procedures (6 items), while Section 2 explored teachers' perceptions of the educational value of the license (9 items). Section 3 focused on anticipated personal gains from the license (18 items), and Section 4 elicited teachers' views on how the license could be improved (13 items).

Sustainability **2023**, 15, 10886 6 of 16

Respondents used a four-point Likert scale ranging from "Strongly Agree" to "Strongly Disagree" to indicate their agreement with each statement.

# 5.3.1. Validity and Reliability of the Survey Instrument

In order to assess the appropriateness of the survey items and the internal structure of the constructs being measured, an exploratory factor analysis (EFA) was conducted using SPSS. The EFA aimed to evaluate the factor structure of the 46-item survey instrument, which measured teachers' perceptions on four factors: clarity of licensure procedures, educational value of the licensure, personal gains from the licensure, and the need for further development of the licensure.

The reliability of the survey instrument was examined using Cronbach's alpha, which measures internal consistency. A Cronbach's alpha value higher than 0.9 indicates excellent internal consistency, while a value higher than 0.7 is considered acceptable. The internal consistency of the constructs in this study demonstrated excellent reliability, with Cronbach's alpha values of 0.962 for clarity of procedures, 0.980 for educational value, 0.970 for personal gains, and 0.984 for teachers' lens for improving the licensure.

To determine the suitability of the data for factor analysis, Bartlett's test of Sphericity and the Kaiser–Meyer–Olkin (KMO) measure were employed. The KMO values, which indicate the sampling adequacy, were 0.883 for clarity of procedures, 0.901 for educational value, 0.922 for personal gains, and 0.924 for teachers' lens for improving the licensure. These values above 0.60 demonstrate high consistency in the data. Additionally, Bartlett's test of Sphericity indicated a significant relationship between the variables (p < 0.05), supporting the appropriateness of the data for factor analysis.

# 5.3.2. Descriptive Statistics

Table 2 provides descriptive statistics for the four elements of the teacher licensure survey. The "clarity of procedures" score, calculated by summing the scores of its related items (six items), had an average of  $20.95 \pm 3.78$  out of 24. The median score was 23 out of 24, with a minimum of 7 and a maximum of 24. The results indicate that teachers' perceptions regarding the clarity of procedures ranged from good to very good.

Variable  Mean (Std. Error)		Clarity of Educational Value Pe		Personal Gains	Perceptions on Further Development	
		20.95 (0.12)	27.90 (0.21)	34.30 (0.31)	39.50 (0.34)	
95% Confidence	Lower Bound	20.72	27.50	33.69	38.83	
Interval for Mean Upper Bound		21.18	28.31	34.90	40.17	
5% Trimmed Mean		21.38	28.52	33.92	40.14	
Median		23.00	28.00	34.00	39.00	
Variance		14.29	43.26	96.13	117.88	
Std. Deviation		3.78	6.58	9.80	10.86	
Minimum		7.00	9.00	18.00	13.00	
Maximum		24.00	36.00	65.00	52.00	
Range		17.00	27.00	47.00	39.00	
Interquartile Range		5.00	8.00	13.00	18.00	
Skewi	0	-1.57(0.08)	-1.21(0.08)	0.44 (0.08)	-0.59(0.077)	
Kurto	osis	2.11 (0.154)	1.07 (0.154)	0.06 (0.154)	$-0.61\ (0.154)$	

**Table 2.** Descriptive statistics for each element of the teacher licensure survey.

The "educational value" score, obtained by summing the scores of its related items (9 items), had an average of  $27.9 \pm 6.58$  out of 36. The median score was 28 out of 36, with a minimum of 9 and a maximum of 36. The findings suggest that teachers' perceptions of the educational value of the teaching license ranged from good to very good.

To illustrate how this judgement was arrived to, it is important to note that 1–2 Likert points were considered to be low to moderate, while 3–4 points were considered good to very good. The range for the "Clarity of procedures" score is calculated by subtracting the minimum value (7) from the maximum value (24), resulting in a range of 17. The average

Sustainability **2023**, 15, 10886 7 of 16

score of 20.95 out of 24 indicates that, on average, teachers' perceptions regarding the clarity of procedures were relatively high. Additionally, the median score of 23, which is close to the maximum, implying that the majority of teachers had high perceptions of clarity of procedures.

Considering the Likert scale (1–2 is considered low to moderate and 3–4 is considered good to very good), an average score of 20.95 out of 24 means that most of the scores fell within the 3–4 range, valued as being "good to very good." Consequently, the range of 17, along with the average and median scores, suggest that teachers' perceptions of the clarity of procedures ranged from "good to very good." The majority of scores falling towards the upper end of the scale further supports the interpretation that teachers had positive perceptions pertaining clarity in procedures.

For the "Personal gains" score, calculated by summing the scores of its related items (18 items), the average was  $34.3 \pm 9.8$  out of 72. The median score was 34 out of 72, with a minimum of 18 and a maximum of 65. The results indicate that teachers' perceptions regarding their personal gains from the teaching license ranged from moderate to good.

The "Perceptions on further development" score, obtained by summing the scores of its related items (13 items), had an average of  $39.5 \pm 10.86$  out of 52. The median score was 39 out of 52, with a minimum of 13 and a maximum of 52. The findings suggest that teachers' perceptions pertaining to further developing the teaching license ranged from good to very good.

#### 6. Results

## 6.1. Clarity of Procedures

Data collected from teachers showed that they believed that the procedures in place for applying for the teaching licensure were lucid enough for them as shown in Table 3.

	Survey Items (Section 1)	Strongly Agree	Agree	Disagree	Strongly Disagree	Mean	Std. Dev.
1	The procedure for earning the teaching license is clear to me with no ambiguity.	584 57.9% 89.7%	321 31.8%	103 10.2%	0 0% 10.2%	3.47	0.796
2	The platform used to apply for the teaching licensure is user-friendly.	601 59.6% 86.6%	303 30.0%	98 9.7%	6 0.5% 10.2%	3.48	0.601
3	The documents required for applying for the teaching licensure are easy to obtain.	559 55.4% 89.9%	348 34.5%	88 8.7%	13 1.2% 9.9%	3.44	0.591
4	The date for applying for the teaching licensure is clarified at the beginning of each academic year.	899 89.1% 96.8%	78 7.7%	20 1.9%	11 1.09% 2.99%	3.85	0.705
5	The duration separating application for the license and obtaining it is reasonable.	684 67.8% 91.9%	243 24.1%	50 4.9%	31 3.0% 7.9%	3.56	0.419
6	I believe that the overall process for obtaining the license is smooth.	325 32.2% 86.8%	551 54.6%	67 6.6%	65 6.4% 13%	3.12	0.554
Score		Clarity of procedures				20.95	3.78

**Table 3.** Teachers' Perceptions pertaining to Clarity of Procedures.

A significant majority of teacher participants (89.7%) expressed that the procedures for obtaining the teaching license were clear. Additionally, 86.6% of participants found the platform used for the licensure application to be user-friendly, and 89.9% reported that obtaining the required documents was easy. Furthermore, an overwhelming 96.8% of participants considered the announcement of the application date at the beginning of the academic year to be suitable, while 91.9% found the timeframe between application and licensure conferral to be reasonable. Finally, 86.8% of the participating teachers perceived the overall process of obtaining the teaching license to be smooth.

Sustainability **2023**, 15, 10886 8 of 16

#### 6.2. Educational Value of the Teacher License through the Lens of Teachers

Survey data showed that, generally, teachers valued the teacher licensure, and considered it as a landmark for quality education in Qatar. The details are presented in Table 4.

Table 4. 🛚	Feachers'	Perceptions	pertaining to	Educational	Value of the	Teaching License.

	Survey Items (Section 1)	Strongly Agree	Agree	Disagree	Strongly Disagree	Mean	Std. Dev.
1	I believe that the teaching license is one of the most important provisions within the Qatari educational context to ensure quality.	356 35.3% 82.2%	473 46.9%	101 10.0%	78 7.7% 17.7%	3.09	0.321
2	I believe that the teaching licensure supports the MOEHE in maintaining best teachers within the teaching stream in Qatar.	346 34.3% 84.0%	501 49.7%	86 8.5%	75 7.4% 15.9%	3.6	0.442
3	I believe that the teaching license is an essential step towards locating Qatar on the world educational map.	409 40.5% 89.9%	497 49.4%	86 8.5%	16 1.5% 10.1%	3.28	0.676
4	I believe that the teaching license is one step towards professionalizing teaching.	561 55.6% 89.6%	342 34.0%	61 6.0%	44 4.3% 10.3%	3.41	0.324
5	I believe that the teaching licensure leverages the quality of teachers in Qatar.	412 40.8% 88.0%	476 47.2%	65 6.4%	55 5.4% 11.8%	3.23	0.223
6	I believe that the teaching licensure will influence positively on student achievement in Qatar.	449 44.5% 85.0%	409 40.5%	77 7.6%	73 7.2% 14.8%	3.22	0.731
7	I believe that the teaching licensure support school improvement initiatives.	434 43.0% 81.5%	389 38.5%	89 8.8%	96 9.5% 18.3%	3.15	0.356
8	I believe that the teaching licensure increases teachers' pride in their careers.	623 61.8% 91.9%	304 30.1%	39 3.8%	42 4.1% 7.9%	3.49	0.228
9	I believe that the teaching licensure is based on comprehendible and context-specific standards.	2 0.01% 2.81%	29 2.8%	834 82.7%	143 14.1% 97.2%	1.06	0.341
Score		Educational value				27.90	6.58

According to the findings presented in Table 4, a significant majority of respondent teachers expressed their belief in the educational value of the teaching license. Specifically, 82.2% of teachers considered the teaching license to be one of the most important measures for ensuring quality in education, as provided by the MOEHE. Additionally, 84% of teachers believed that the teaching license effectively contributed to maintaining high-quality teachers within Qatar's public school system. Furthermore, a substantial 89.9% of teachers perceived the teaching license as a means of showcasing Qatar's strong presence on the global educational stage, and 89.6% viewed it as an important step towards professionalizing the teaching profession in the country.

Moreover, the majority of respondent teachers (88%) believed that the teaching licensure positively impacted the quality of teachers, while 85% acknowledged its positive influence on student achievement. Furthermore, 81.5% of teachers expressed support for school improvement initiatives that aligned with the teacher licensure. Additionally, an overwhelming 91.9% of teachers saw the teaching license as a source of pride for educators in the country. However, it is noteworthy that 97.2% of teachers felt that the teaching license was based on generic standards that did not consider the specific context of Qatar's education system.

# 6.3. Personal Gains from the Teacher Licensure Procedures through the Lens of Teachers

While teachers suggested that the procedures for the new licensure scheme (performance-based teaching licensure) were clear, and despite praising the teaching license by considering it a key contributor to teacher quality in the country, those same teachers did not foresee personal gains out of it. The details of the elements addressed within this section are presented in Table 5.

Sustainability **2023**, 15, 10886 9 of 16

**Table 5.** Teachers' Perceptions pertaining to their Personal Gains from the Teaching License.

	Survey Items (Section 3)	Strongly Agree	Agree	Disagree	Strongly Disagree	Mean	Std. Dev.
1	The teaching license procedures support me in improving my instructional strategies.	107 10.6% 20.4%	99 9.8%	564 55.9%	238 23.6% 79.6%	2.07	0.289
2	The teaching license procedures push me to explore the recent and up-to-date practices in education.	6 0.5% 2.8%	24 2.3%	587 58.2%	391 38.7% 96.9%	1.64	0.491
3	The teaching license procedures catalyze my collaboration with teachers in my department.	0 0% 1.6%	17 1.6%	715 70.9%	276 27.3% 98.2%	1.74	0.513
4	The teaching license procedures catalyze my collaboration with teachers in outside my department.	0 0% 1%	11 1.0%	698 69.2%	299 29.6% 98.8%	1.71	0.617
5	The teaching license procedures encourages me to reflect on practice.	56 5.5% 15.5%	101 10.0%	443 43.9%	408 40.4% 84.3%	1.80	0.212
6	The teaching licensure procedures encourage me to distinguish my areas of strengths and weaknesses.	119 11.8% 27.6%	159 15.8%	590 58.5%	140 13.8% 72.4%	2.11	0.199
7	The teaching licensure procedures encourage me to develop a personal road map towards teaching effectiveness.	0 0% 8.8%	89 8.8%	727 72.1%	192 19.0% 91.1%	1.89	0.356
8	The teaching licensure procedures encourage me to indulge in an educational discourse around improving student outcomes.	2 0.01% 2.81%	29 2.8%	834 82.7%	143 14.1% 97.2%	1.06	0.226
9	The teaching licensure procedures constitute an incentive for me to utilize student achievement in planning my lessons.	5 0.04% 1.74%	18 1.7%	619 61.4%	369 36.6% 98.3%	1.66	0.752
10	The teaching licensure procedures motivate me to work in smarter ways than I usually do.	79 7.8% 18.0%	103 10.2%	309 30.6%	517 51.2% 82.0%	1.74	0.869
11	The teaching licensure procedures encourage me to act as a risk-taker when trying out new teaching methods.	37 3.6% 12.4%	89 8.8%	298 29.5%	584 57.9% 87.6%	1.58	0.598
12	The teaching licensure procedures encourage me to belong a learning community in my school.	0 0% 1.6%	17 1.6%	317 31.4%	674 66.8% 98.4%	1.34	0.433
13	The teaching licensure procedures create a positive climate in my school.	0 0% 2.4%	25 2.4%	118 11.7%	865 85.8% 97.5%	1.16	0.386
14	The teaching licensure procedures promotes personal monitoring for teachers.	0 0% 3.4%	35 3.4%	198 19.6%	775 76.8% 96.6%	1.26	0.715
15	The teaching licensure procedures support teachers' self-efficacy.	67 6.6% 26.0%	196 19.4%	573 56.8%	172 17.0% 74.0%	2.15	0.119
16	The teaching license renewal creates motivation for teachers for continuous professional growth.	0 0% 1.2%	12 1.2%	377 37.4%	619 61.4% 98.8%	1.39	0.291
17	I believe that the teaching licensure procedures are a burden for myself.	717 71.1% 92.4%	213 21.1%	45 4.4%	33 3.2% 7.6%	3.6	0.448
18	I believe that the teaching licensure wastes my precious time at school.	569 56.4% 85.0%	286 28.6%	78 7.7%	75 7.4% 15.0%	3.33	0.819
Score		Personal gains				34.30	9.80

Based on the data presented in Table 5, it can be observed that respondent teachers expressed uncertainty regarding the specific benefits of the teaching license for their own careers. The majority of teachers did not perceive the teaching license as contributing to the improvement of their instructional practices (79.6%), staying up to date with educational trends (96.9%), fostering collaboration within their department (98.2%) or across departments (98.8%), or motivating their involvement in learning communities within their schools (98.4%). Additionally, a significant proportion (84.3%) did not believe that the license encouraged reflective practice, and 72.4% felt that it did not help them iden-

Sustainability **2023**, 15, 10886 10 of 16

tify their areas of strengths and weaknesses. Furthermore, 91.1% of teachers did not see a relationship between the license initiatives and their personal professional growth plans.

Moreover, the majority of teachers did not perceive the license as a catalyst for initiating discussions on student outcomes (97.2%) or incentivizing them to utilize student results to develop lesson plans that better address student needs (98.3%). Additionally, a large percentage of teachers (82%) did not see any impact of the licensing procedures on their work methods, and 87.6% of teachers did not believe that it encouraged them to take risks. Furthermore, teachers felt that the licensing procedures did not contribute to fostering a positive overall school climate (97.5%).

Furthermore, most respondent teachers did not perceive significant personal impacts resulting from the licensing procedures. A majority (96.6%) believed that the license did not contribute to a personal monitoring scheme, 74% did not perceive any effect on their self-efficacy, and 98.8% assumed that it had no influence on their motivation to plan for professional development. On the contrary, 92.4% of teachers felt that the license consumed their valuable time, and 85% considered it to be burdensome.

# 6.4. Teachers' Lens for Improving the Teaching Licensure

Teachers agreed on most of the research-based recommendations that constituted section four of the survey, as presented in Table 6.

T.1.1. ( T1 /			C (1 1	1	
<b>Table 6.</b> Teachers'	perceptions	nertaining to	) fiirfner deve	ioning the	e feaching license
Tubic of Teachers	perceptions	per turning te	rantifici acve		c teaching needse.

	Survey Items (Section 4)	Strongly Agree	Agree	Disagree	Strongly Disagree	Mean	Std. Dev.
1	I believe that the performance-based licensure should continue to be the scheme adopted by the MOEHE.	404 40.0% 77.3%	376 37.3%	157 15.5%	71 7.0% 22.7%	3.10	0.998
2	The teaching license should be based on multiple classroom observations.	439 43.5% 72.8%	296 29.3%	169 16.7%	104 10.3% 27.2%	3.06	0.789
3	The inclusion of the school principal in the examining committee is a source of trust for teachers.	115 11.4% 32.8%	216 21.4%	389 38.5%	288 28.5% 67.2%	2.15	0.987
4	The inclusion of the subject coordinator in the examining committee is a source of trust for teachers.	289 28.6% 50.9%	225 22.3%	263 26.0%	231 22.9% 49.1%	2.56	0.896
5	I believe that the teaching licensure for expert teachers should be different from that for novice ones.	432 42.8% 67.7%	251 24.9%	115 11.4%	210 20.8% 32.3%	2.89	0.796
6	I believe that a greater number of applicants for the licensure should be accommodated on yearly basis.	378 37.5% 79.9%	428 42.4%	177 17.5%	25 2.4% 20.1%	3.14	0.883
7	I think that the teaching licensure should constitute an incentive for teachers to collaborate.	442 43.8% 91.0%	476 47.2%	65 6.4%	25 2.4% 9.0%	3.32	0.691
8	I believe that the teaching licensure should constitute an incentive for teachers to try out new methods of teaching.	434 43.0% 81.5%	389 38.5%	89 8.8%	96 9.5% 18.3%	3.15	0.873
9	I believe that the teaching licensure should constitute an incentive for teachers to teachers to reflect on practice.	291 28.8% 49.5%	209 20.7%	277 27.4%	231 22.9% 50.5%	1.68	0.978
10	I believe that a teacher under licensing should be able to seek professional support from an official entity affiliated with the teacher licensure office.	623 61.8% 91.9%	304 30.1%	39 3.8%	42 4.1% 7.9%	3.49	0.759
11	I believe involving licensed teachers in the process of unlicensed teachers would benefit the current provision.	409 40.5% 89.9%	497 49.4%	86 8.5%	16 1.5% 10.1%	3.28	0.669
12	I believe that the teaching standards underlying the teaching license need further revision.	346 34.3% 84.0%	501 49.7%	86 8.5%	75 7.4% 15.9%	3.60	0.877
13	I believe that teachers require sufficient practice against standards prior to teaching licensure observation.	741 73.5% 95.4%	219 21.7%	31 3.0%	17 1.6% 4.6%	3.67	0.869
Score	Perceptio	ns on further developn	nent			39.50	10.86

Sustainability **2023**, 15, 10886 11 of 16

Based on the data provided in Table 6, several key findings emerge regarding respondent teachers' recommendations and perspectives on the current performance-based teaching licensure.

Firstly, a significant proportion of teachers (77.3%) recommended adhering to the existing licensure system. However, a notable majority (72.8%) expressed the belief that the licensure should be based on multiple observations rather than relying on a single assessment. Additionally, while 67.2% of teachers welcomed the inclusion of the school principal in the examining committee, opinions were divided (50%) regarding the inclusion of the subject coordinator.

Furthermore, the majority of teachers (67.6%) advocated for a differentiated teaching licensure that takes into account the varying levels of experience between novice and expert teachers. Additionally, a substantial percentage (79.9%) felt that the number of applicants should be increased. Respondent teachers emphasized the importance of licensing procedures that promote teacher collaboration (91%) and encourage the exploration of new teaching methods (81.5%). However, only 49.5% believed that the licensure process should actively stimulate reflective practice.

Moreover, a significant majority (91.1%) welcomed the concept of receiving support from an office affiliated with the teaching licensure authorities. Furthermore, 89.9% of teachers favored involving already licensed teachers as advisors in the licensing process for their colleagues. Lastly, a considerable proportion (84%) of respondent teachers expressed the opinion that professional standards necessitated further review, while an overwhelming majority (95.4%) endorsed the idea of adequate practice aligned with the standards prior to the teaching licensure observation.

### 6.5. Teacher Perceptions in Relation to Age, Gender, and Experience

To explore the perceptions of teachers in relation to age, gender and experience, t-tests and ANOVA were conducted. Independent samples t-tests showed a statistically significant difference between males and females, with males showing more positive perceptions pertaining all four constructs. In terms of clarity of procedures males scored (M = 3.97, SD = 0.66) versus females (M = 3.17, SD = 0.64; t (1008) = 24.877, p = 0.000, two-tailed). Likewise, in relation to educational value of the licensure, males scored (M = 3.76, SD = 0.083) versus females (M = 2.66, SD = 0.64; t (1008) = 34.34, p = 0.000, two-tailed). Moreover, in terms of personal gains, males scored (M = 2.42, SD = 0.37) versus females (M = 1.56, SD = 0.32); t (1008) = 39.31, p = 0.000, two-tailed). Furthermore, in terms of perceptions pertaining further development, males scored (M = 3.87, SD = 1.48) versus females (M = 2.49, SD = 0.62).

On the other hand, in terms of 'perceptions regarding the clarity of the licensure procedures', ANOVA analysis indicated, a significant difference between the age groups  $(p = 0.000, \alpha = 0.05)$ ; and a significant difference in relation to years of experience  $(p = 0.000, \alpha = 0.05)$ ;  $\alpha = 0.05$ ). The same result was obtained for all other three constructs, indicating that age, and years of experience shaped teachers' perceptions. Pearson Correlation Coefficients showed that: (1) more aged participants exhibited fewer positive perceptions pertaining the clarity of procedures (r = -0.807); and (2) more experienced teachers exhibited fewer positive perceptions pertaining clarity of procedures (r = -0.719). Moreover, Pearson Correlation Coefficients showed that: (1) more aged participants exhibited fewer positive perceptions pertaining the educational value of the licensure (r = -0.811); and (2) more experienced teachers exhibited fewer positive perceptions pertaining the educational value of the licensure (r = -0.773). Furthermore, Pearson Correlation Coefficients showed that: (1) more aged participants exhibited fewer positive perceptions pertaining the personal gains from the licensure (r = -0.907); and (2) more experienced teachers exhibited fewer positive perceptions pertaining the personal gains from the licensure (r = -0.913). Finally, Pearson Correlation Coefficients showed that: (1) more aged participants held fewer positive perceptions pertaining future development of the licensure (r = -0.869); and

Sustainability **2023**, 15, 10886

(2) more experienced teachers held less positive perceptions pertaining future development of the licensure (r = -0.855).

Thus, it can be argued that males were slightly more positive about the licensure. Moreover, more aged participants, exhibiting more years of experience were less clear on licensing procedures, the educational value of the license, their personal gains, and potential future development.

#### 7. Discussion

The findings revealed that teachers perceived the licensure procedures as clear and straightforward, encompassing aspects such as the application process, required documentation, application duration, and user-friendliness of the online platform. This aligns with previous literature highlighting the significance of clarity in licensure procedures [42]. Interestingly, this study's results contrasted with previous research by [29], which examined the portfolio-based licensure system in Qatar. It suggests that the complexity associated with the portfolio-based approach was overcome with the adoption of the performance-based license.

Moreover, teachers expressed positive evaluations of the teaching licensure, perceiving it as a means of enhancing educational quality in Qatar and positioning the country prominently in the global educational landscape. This positive perception aligns with recommendations from the literature on teaching licensure [46-48], indicating that when teachers value the licensure system, they are more likely to derive benefits from it. However, contrasting findings emerged in the third part of the questionnaire, suggesting a need for reflection on this argument.

Despite the overall positive views regarding the teaching licensure, teachers failed to recognize its impact on their personal professional development. They struggled to identify its relevance to their classroom performance, departmental collaboration, or school-level contributions. This perceptional polarity indicates that while teachers acknowledged the macro-level value of the licensure, they struggled to envision its benefits at the micro-level.

In fact, teachers perceived the teaching licensure as burdensome, adding to their workload rather than supporting their professional growth. This perception aligns with warnings from researchers such as [48,49] emphasizing the need for teachers to understand how the licensure system influences their overall professional practice, beyond its educational value.

This finding could be interpreted in light of the initial introduction and subsequent suspension and resumption of the teaching licensure in the Qatari educational community. Initially, the licensure system faced criticism for its lack of contextual sensitivity to the local needs, values, structures, and procedures [30]. It failed to establish the necessary cultural foundation for educational reform [53]. The suspension and relaunch of the licensure occurred amid media criticism, lacking data-driven publications explaining the reasons for transitioning from a portfolio-based to a performance-based approach. Consequently, teachers in this study echoed what they had likely heard in the media about the licensure's developmental potential for enhancing education quality in Qatar. However, without a well-established cultural context, they struggled to internalize the personal benefits.

On the other hand, teachers' recommendations for improving the licensure system emphasized trust, collegiality, differentiation based on seniority, and allowing for experimentation. These recommendations align with international research by [16,34,38] that licensure processes should foster a developmental culture rather than a regulatory one. These studies highlight the lack of evidence indicating that certification regulations alone improve teacher quality, emphasizing the importance of growth-promoting processes and procedures. This entails fostering positive school cultures, promoting teacher collaboration, and enabling collective and individual inquiry.

In conclusion, this study sheds light on teachers' perceptions of the performance-based teaching licensure scheme. While teachers acknowledged the clarity of procedures and recognized the licensure's potential value at the macro-level, they struggled to perceive its

Sustainability **2023**, 15, 10886

personal benefits and impact on their professional development. The findings emphasize the importance of establishing a cultural foundation and growth-promoting processes within the licensure system to support teachers in deriving maximum value from it.

#### 8. Conclusions

This study aimed to explore teachers' perspectives on the performance-based teaching licensure, revealing a mixed view among participants. On one hand, teachers recognized the teaching license as a transformative tool for enhancing the quality of education in Qatar. However, on the other hand, they downplayed its significance in terms of their own personal growth and development. This finding highlights the importance of involving teachers in the reform process, as research suggests that neglecting their active involvement can lead to the failure of reform initiatives. Teachers possess deep-rooted values, beliefs, and routines, and without addressing these aspects and fostering a culture of incremental change, reform efforts may encounter resistance and lack of alignment with teachers' needs and perspectives. For the teaching licensure to achieve its intended goals, it is crucial to internalize its core values within teachers, enabling them to embrace and effectively improve their professional practice.

# 9. Contribution to the Global Debate on Teaching Licensure

Globally, teaching licensure has been subject to widespread criticism regarding its actual impact on the quality of education [54–56]. Additionally, the standards used for teacher licensure have been a topic of debate [57–59].

This study contributes to the ongoing global debate by revealing that teachers themselves do not perceive any positive influence of the teaching licensure on the quality of their teaching. They expressed confidence that the procedural requirements of the licensure did not contribute to their professional knowledge, practice, or growth. Consequently, this study suggests that teachers are reluctant to attribute any benefits gained from the licensure's procedural requirements to their understanding of learning, learner diversity, curriculum, and teaching methods. Moreover, they doubted any connection between the teaching license and the development of positive learning environments, learner-centered teaching, or the use of diverse forms of assessment. Reflective practice was also not seen as promoted by the licensure.

Furthermore, this study aligns with other research cautioning against the use of standards for licensing purposes. The standards employed were seen as ambiguous and lacking contextual specificity. Ref. [60] argue that the standards imposed by governments or international organizations like the Organization for Economic Cooperation and Development (OECD) restrict innovation and constructivist pedagogical models. Similarly, [61] suggests that standards diminish teachers' professional autonomy, reducing teaching to the acquisition of a limited set of prescribed knowledge and competencies. Although not extensively addressed in this study, the fact that nearly 97% of teachers questioned the suitability of teaching standards is concerning and calls for further investigation in future studies.

Lastly, this study adds another dimension to the debate on teaching licensure: the voice of teachers. While existing research emphasizes the importance of shared decision-making in schools, the findings from this study highlight the need for policymakers to actively listen to teachers' voices and understand their perspectives on licensure. Teachers were ambiguous about the license, acknowledging its educational value in theory but failing to see its relevance to their day-to-day practices in schools. Thus, listening to teachers' voices becomes crucial if the true aim of licensure is to improve the quality of education. Exploring the relationship between teachers' views on the impact of teaching licensure on their teaching practices and their involvement in shaping licensure policies in different educational contexts beyond Qatar would be an interesting avenue for future research.

Sustainability **2023**, 15, 10886 14 of 16

**Author Contributions:** Conceptualization, N.G. and A.A.-T.; methodology N.G. and A.A.-T.; software, T.S.; validation, N.G., A.A.-T. and T.S.; formal analysis, N.G., A.A.-T. and T.S.; investigation, N.G.; resources A.A.-T.; data curation, T.S.; writing—original draft preparation, N.G., A.A.-T. and T.S.; writing—review and editing, N.G.; visualization, A.A.-T.; supervision, N.G.; project administration, A.A.-T.; funding acquisition, A.A.-T. All authors have read and agreed to the published version of the manuscript.

**Funding:** This study was made possible by NPRP grant # 13S-0209-200319 from the Qatar National Research Fund (a member of Qatar Foundation). The statements made herein are solely the responsibility of the authors.

**Institutional Review Board Statement:** The study was conducted according to the guidelines of the Declaration of Helsinki, and approved by the Institutional Review Board of Qatar University (QU-IRB 16434-E/21) on December 2021.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Not applicable.

**Conflicts of Interest:** The authors declare no conflict of interest.

#### References

1. Harrison, R.; Meyer, L.; Rawstorne, P.; Razee, H.; Chitkara, U.; Mears, S.; Balasooriya, C. Evaluating and enhancing quality in higher education teaching practice: A meta-review. *Stud. High. Educ.* **2020**, *47*, 80–96. [CrossRef]

- 2. Tanjung, E.F. Impact of public wellness, competitiveness, and government effectiveness on quality of education in Asian countries. *Cypriot J. Educ. Sci.* **2020**, *15*, 1720–1731. [CrossRef]
- 3. Patrinos, H.A.; Psacharopoulos, G. Returns to education in developing countries. In *The Economics of Education*; Academic Press: Cambridge, MA, USA, 2020; pp. 53–64. [CrossRef]
- 4. Hofmarcher, T. The effect of education on poverty: A European perspective. Econ. Educ. Rev. 2021, 83, 102124. [CrossRef]
- 5. Howells, K. The Future of Education and Skills: Education 2030: The Future We Want; OECD: Paris, France, 2018.
- 6. Ghamrawi, N. No Teacher Left Behind: Subject Leadership that Promotes Teacher Leadership. *Educ. Manag. Adm. Leadersh.* **2010**, 38, 304–320. [CrossRef]
- 7. Ghamrawi, N. Trust Me: Your School Can Be Better—A Message from Teachers to Principals. *Educ. Manag. Adm. Leadersh.* **2011**, 39, 333–348. [CrossRef]
- 8. Ghamrawi, N. In Principle, It is Not Only the Principal! Teacher Leadership Architecture in Schools. *Int. Educ. Stud.* **2013**, *6*, 148–159. [CrossRef]
- 9. Ghamrawi, N. Teachers' virtual communities of practice: A strong response in times of crisis or just another Fad? *Educ. Inf. Technol.* **2022**, 27, 5889–5915. [CrossRef]
- 10. Ghamrawi, N. Toward agenda 2030 in education: Policies and practices for effective school leadership. *Educ. Res. Policy Pract.* **2023**, 22, 325–347. [CrossRef]
- 11. Ghamrawi, N.; Shal, T.; Ghamrawi, N.A. The Rise and Fall of Teacher Leadership: A Post-Pandemic Phenomenological Study. *Leadersh. Policy Sch.* **2023**, 22, 1–16. [CrossRef]
- 12. Chu, J.H.; Loyalka, P.; Chu, J.; Qu, Q.; Shi, Y.; Li, G. The impact of teacher credentials on student achievement in China. *China Econ. Rev.* **2015**, *36*, 14–24. [CrossRef]
- 13. Hanushek, E.A.; Rivkin, S.G. Teacher quality. In *Handbook of the Economics of Education*; Elsevier: Amsterdam, The Netherlands, 2006; Volume 2, pp. 1051–1078.
- 14. Souto-Manning, M. "Good teaching" and "good teachers" for whom? Critically troubling standardized and corporatized notions of quality in teacher education. *Teach. Coll. Rec.* **2019**, *121*, 1–47. [CrossRef]
- 15. Ingvarson, L.; Rowley, G. Quality Assurance in Teacher Education and Outcomes: A Study of 17 Countries. *Educ. Res.* **2017**, *46*, 177–193. [CrossRef]
- 16. Creemers, B.P.; Peters, T.; Reynolds, D. (Eds.) School Effectiveness and School Improvement; Routledge: London, UK, 2022.
- 17. Ulla, M.B. Writing for Higher Education Academy Fellowship Towards Professionalization of Teaching: Perspectives from University Teachers in Thailand. In *Handbook of Research on Teacher Education*; Springer: Singapore, 2022; pp. 867–883. [CrossRef]
- 18. Shuls, J.V. Raising the Bar on Teacher Quality: Assessing the Impact of Increasing Licensure Exam Cut-Scores. *Educ. Policy* **2017**, 32, 969–992. [CrossRef]
- 19. Yauney, J.M. K-12 CS Teacher Licensing in the US. In Proceedings of the 53rd ACM Technical Symposium on Computer Science Education, Providence, RI, USA, 2–5 March 2022; Volume 2, p. 1171.
- 20. Adoniou, M.; Gallagher, M. Professional standards for teachers—What are they good for? Oxf. Rev. Educ. 2016, 43, 109–126. [CrossRef]
- 21. Medina, R.A. Who Should Be Able to Teach Our Nation's Children? Teach. Educ. Q. 2022, 49, 80–85.

Sustainability **2023**, 15, 10886 15 of 16

22. Darling-Hammond, L. Evaluating Teacher Effectiveness: How Teacher Performance Assessments Can Measure and Improve Teaching; Center for American Progress: Washington, DC, USA, 2010.

- 23. Sutcher, L.; Darling-Hammond, L.; Carver-Thomas, D. Understanding teacher shortages: An analysis of teacher supply and demand in the United States. *Educ. Policy Anal. Arch.* **2019**, *27*, 35. [CrossRef]
- 24. Yada, A.; Björn, P.M.; Savolainen, P.; Kyttälä, M.; Aro, M.; Savolainen, H. Pre-service teachers' self-efficacy in implementing inclusive practices and resilience in Finland. *Teach. Teach. Educ.* **2021**, *105*, 103398. [CrossRef]
- 25. Mikkilä-Erdmann, M.; Warinowski, A.; Iiskala, T. Teacher Education in Finland and Future Directions. In *Oxford Research Encyclopedia of Education*; Oxford University Press: Oxford, UK, 2019. [CrossRef]
- 26. Song, J.; Sharma, U.; Choi, H. Impact of teacher education on pre-service regular school teachers' attitudes, intentions, concerns and self-efficacy about inclusive education in South Korea. *Teach. Teach. Educ.* **2019**, *86*, 102901. [CrossRef]
- 27. Brewer, D.; Augustine, C.; Zellman, G.; Ryan, G.; Goldman, C.; Stasz, C.; Constant, L. Education for a New Era: Design and Implementation of K-12 Education Reform in Qatar; Rand Corporation: Santa Monica, CA, USA, 2007.
- 28. Nasser, R. Qatar's educational reform past and future: Challenges in teacher development. *Open Rev. Educ. Res.* **2017**, *4*, 1–19. [CrossRef]
- 29. Abu-Tineh, A.; Sadiq, H.; Al-Mutawah, F.; Chaaban, Y. An Examination of the Qatari Licensure System: Giving Voice to Educators at Government-Funded Schools. *J. Educ. Train. Stud.* **2017**, *5*, 225. [CrossRef]
- 30. Ellili-Cherif, M.; Romanowski, M.H.; Nasser, R. All that glitters is not gold: Challenges of teacher and school leader licensure licensing system in Qatar. *Int. J. Educ. Dev.* **2011**, 32, 471–481. [CrossRef]
- 31. Yao, Y.; Aldrich, J.; Foster, K.; Pecina, U. Preservice Teachers' Perceptions of an Electronic Portfolio as a Tool for Reflection and Teacher Certification. *J. Educ. Res. Policy Stud.* **2009**, *9*, 25–43.
- 32. Cochran-Smith, M. Exploring teacher quality: International perspectives. Eur. J. Teach. Educ. 2021, 44, 415–428. [CrossRef]
- 33. Wiswall, M. The dynamics of teacher quality. J. Public Econ. 2013, 100, 61–78. [CrossRef]
- 34. Georges, A.; Borman, K.M.; Lee, R.S. Mathematics reform and teacher quality in elementary grades: Assessments, teacher licensure, and certification. *Educ. Policy Anal. Arch.* **2010**, *18*, 13. [CrossRef]
- 35. Green, R.L. Practicing the Art of Leadership: A Problem-Based Approach to Implementing the Professional Standards for Educational Leaders; Pearson: Upper Saddle River, NJ, USA, 2017; p. 07458.
- 36. Ajie, G.; Kaegon, L.E.S. Quality Indicators and Students' Academic Performance in Public Secondary Schools In Rivers State. *Int. J. Innov. Soc. Sci. Humanit. Res.* **2021**, *9*, 56–64.
- 37. Egeberg, H.M.; McConney, A.; Price, A. Classroom Management and National Professional Standards for Teachers: A Review of the Literature on Theory and Practice. *Aust. J. Teach. Educ.* **2016**, *41*, 1–18. [CrossRef]
- 38. Call, K.; Christie, M.; Simon, S.E. Do preservice teachers believe they use the Australian professional standards for teachers to inform their professional learning? *Aust. J. Teach. Educ. (Online)* **2021**, *46*, 98–114. [CrossRef]
- 39. Gatlin, D. A Pluralistic Approach to the Revitalization of Teacher Education. J. Teach. Educ. 2009, 60, 469–477. [CrossRef]
- 40. Larsen, B.; Ju, Z.; Kapor, A.; Yu, C. *The Effect of Occupational Licensing Stringency on the Teacher Quality Distribution*; (No. w28158); National Bureau of Economic Research: Cambridge, MA, USA, 2020. [CrossRef]
- 41. Sass, T.R. Licensure and Worker Quality: A Comparison of Alternative Routes to Teaching. J. Law Econ. 2015, 58, 1–35. [CrossRef]
- 42. Shuls, J.V.; Trivitt, J.R. Teacher effectiveness: An analysis of licensure screens. Educ. Policy 2015, 29, 645–675. [CrossRef]
- 43. Goldhaber, D. Licensure: Exploring the value of this gateway to the teacher workforce. In *Handbook of the Economics of Education*; Elsevier: Amsterdam, The Netherlands, 2011; Volume 3, pp. 315–339.
- 44. Walsh, K. Teacher Certification Reconsidered: Stumbling for Quality; Sage: London, UK, 2001.
- 45. Buddin, R.; Zamarro, G. Teacher Quality, Teacher Licensure Tests, and Student Achievement; RAND: Santa Monica, CA, USA, 2008.
- 46. Darling-Hammond, L. Accountability in Teacher Education. Action Teach. Educ. 2020, 42, 60–71. [CrossRef]
- 47. Anderson, K.A. A National Study of the Differential Impact of Novice Teacher Certification on Teacher Traits and Race-Based Mathematics Achievement. *J. Teach. Educ.* **2019**, *71*, 247–260. [CrossRef]
- 48. Earp, M.A. Relationships among School Leader Practices, Teacher Morale and Efficacy, and Teacher Retention in Northeastern North Carolina; North Carolina State University: Raleigh, NC, USA, 2021.
- 49. Burroughs, N.; Gardner, J.; Lee, Y.; Guo, S.; Touitou, I.; Jansen, K.; Schmidt, W. A Review of the Literature on Teacher Effectiveness and Student Outcomes. *Teach. Excell. Equity* **2019**, 7–17. [CrossRef]
- 50. Wiseman, A.W.; Al-Bakr, F. The elusiveness of teacher quality: A comparative analysis of teacher certification and student achievement in Gulf Cooperation Council (GCC) countries. *Prospects* **2013**, *43*, 289–309. [CrossRef]
- 51. Romanowski, M.H.; Amatullah, T. The impact of Qatar national professional standards: Teachers' perspectives. *Int. J. Res. Stud. Educ.* **2014**, 3. [CrossRef]
- 52. Creswell, J.W.; Plano-Clark, V.L., 3rd. *Designing and Conducting Mixed Methods Research*; Sage Publications: Thousand Oaks, CA, USA, 2007.
- 53. Choi, T.-H.; Walker, A.D. A heuristic model for tailoring teacher development to educational reforms: Focusing on ambiguity and conflict generation. *Teach. Teach. Educ.* **2018**, 74, 72–84. [CrossRef]
- 54. Darling-Hammond, L. Teacher education around the world: What can we learn from international practice? *Eur. J. Teach. Educ.* **2017**, 40, 291–309. [CrossRef]
- 55. Feng, L.; Sass, T.R. Teacher Quality and Teacher Mobility. Educ. Finance Policy 2017, 12, 396–418. [CrossRef]

Sustainability **2023**, 15, 10886

56. Kusumawardhani, P.N. Does teacher certification program lead to better quality teachers? Evidence from Indonesia. *Educ. Econ.* **2017**, 25, 590–618. [CrossRef]

- 57. Bourke, T.; Ryan, M.; Ould, P. How do teacher educators use professional standards in their practice? *Teach. Teach. Educ.* **2018**, 75, 83–92. [CrossRef]
- 58. Rickenbrode, R.; Drake, G.; Pomerance, L.; Walsh, K. 2018 Teacher Prep Review. Natl. Counc. Teach. Qual. 2018. [CrossRef]
- 59. Darling-Hammond, L.; Wise, A.E.; Klein, S.P. A License to Teach: Building a Profession for 21st-Century Schools; Routledge: London, UK. 2019.
- 60. Robertson, S.L.; Sorensen, T. Global transformations of the state, governance and teachers' labour: Putting Bernstein's conceptual grammar to work. *Eur. Educ. Res. J.* **2018**, *17*, 470–488. [CrossRef]
- 61. Romanowski, M.H. The Qatar National Professional Standards for School Leaders: A critical discourse analysis using Habermas' theory of knowledge constitutive interests. *Int. J. Leadersh. Educ.* **2013**, *17*, 174–199. [CrossRef]

**Disclaimer/Publisher's Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.