

Country Models for Teacher's Certification in Saudi Arabia

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ABSTRACT

Parents, practitioners, and policy makers agree that the key to improve and develop both public and private education is to place highly qualified teachers in all classrooms. But a more elusive goal is how to empirically measure teacher quality. One suggested measure is to require teacher's licensing or certification. Currently, certification is an inevitable component of national education systems worldwide. The main goal of this paper is to discuss teacher licensing or certification from different countries, with an intention to provide ideas or suggestions to the policy makers in Saudi Arabia with regards to the standards of teacher certification or licensing which might be implemented soon in the kingdom in the near future.

Keywords: Quality teacher, Teacher certification, Teacher licensing, Current challenges facing education in Saudi Arabia, Professional teaching standards.

Introduction

Many countries aspire for social equality, a strong economy, a highly skilled and motivated workforce and an advanced health provision. This ambition can be brought to reality by only one means i.e., education. Because of this, the sector of education is often given the largest budgetary allocations. Worldwide, educational authorities have demonstrated an increasing level of concern about the effectiveness, quality and standards of achievement in schools.

The Kingdom of Saudi Arabia just like any other countries in the world places great emphasis and importance on education, as it is the field that prepares the future generations (Al-Mousa, 2010). Currently, the kingdom is undergoing massive transformation in education with a mission to create a knowledge based society. This is done with the adoption of a holistic approach to reform and improve the quality of education.

Preparing and certifying the most highly qualified teachers are elusive goals for most education systems (Burghes, 2011, p. 9). Many educators, policymakers, and scholars worldwide tie what students know to professional standards for teachers (Akiba, 2013), and professional standards for teachers are increasingly aligned with global norms and expectations, even in the world's most remote and underdeveloped regions.

(OECD 2011).

From the active role played by the teacher in any educational system, believing the effectiveness of impact teacher qualification in the quality and standard of education, States with different philosophies, objectives and social and economic systems took over the teaching profession and upgrading the teacher all their interest and attention. The availability of efficient teacher and upgrading the teaching profession will increase the effectiveness of the education system and contributes to the quality of future generations.

Teachers can have large effects on the student's achievement, as suggested by a recent large-scale study in North Carolina which found that the differences in achievement are due to the students who had the most qualified teachers

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versus those who had the least qualified. These very large differences were associated with teachers' initial preparation for teaching, licensing in the field taught, strength of academic background, level of experience, and demonstration of skills through National Certification, all of which are variables that could be directly addressed through policy.

The teacher cannot do tasks and roles required of him, unless he has the knowledge, skills and attitudes that enable him to do so. This can be achieved only through the professionalization of the profession through training, continuous professional development programmers when joining the profession, targeted and quality standards guide for performance, and a code of ethics includes the values and ideals of behavior and commitments, and the law regulating the profession and adjusts performance, functions and specific responsibilities and tasks, and professional associations help him and support him (Bell, 2011, 29-32)

Challenges Facing Saudi Education

Saudi Arabia is a very young country where one in every two citizens is younger than 15 years old (CIA, 2002). This fact makes a challenging situation for the Ministry of Education to provide a quality education to prepare the young generation to build the country and decrease the dependence on oil as a primary source of economic growth (Onsman, 2010).

The Ministry of Education acknowledged that Saudi education has some serious shortcomings such as low quality of education. This is due to the prevalence of poor examination results, and the poor performances of the graduates of the general education at the universities and vocational institutes. (Al-Awad, 1998)

The Saudi education system to improve and keep up with the international trends in education. However, these constant efforts did not lead to significant changes in crucial areas such as math, science, and higher levels of thinking skills (Batterjee, 2011).

Krieger (2007) in his evaluation of Saudi education reform mentions the "outdated teaching methods" that still existed in its universities. Also, he touches on an important point when he says, "reformers not only want to change what is taught, but how it is taught. In the typical Saudi classroom, rote learning is stressed over innovative thinking" (Krieger, 2007, p. 4). Rote memorization as a feature of the Saudi education system could be "traced back to the approach in the Kuttab School" (p. 40), which were the early form of public education in the region in the 7th century CE. The curriculum of the Kuttab School is totally focused on the memorization of Quran and religious basic texts (Rugh, 2002).

Another weakness area reported in Saudi literature is the low quality of teaching preparation programs. Alhammed, Zeadah, Alotaiby, and Motawaly (2004) studied the learning culture in Saudi Arabia and concluded several points where some of them are related to teacher training procedure and teachers' knowledge in Saudi Arabia. They claim that most of Saudi teachers lack sufficient knowledge about student learning and needs. Also, they need professional training in classroom management and assessment. They attribute these weaknesses to the fact that teacher education is provided by several institutions that vary on their objectives and scope. Also, they report a very interesting point, which is the gap between theory that is taught in teaching institutions and the actual classroom practice.

There are national endeavors toward reforming the education system to cope with the new era demands. These serious efforts started in 2005 when Ministry of Education decided to make drastic changes in the curricula and move it from concentrating on just the attainment of knowledge to building critical thinking skills. They started providing comprehensive training for in-service teachers to familiarize them with the new changes in their curriculum and help them to develop the appropriate teaching methods (Algarfi, 2010, p.8).

Statement of the Problem

Although the existence of the efforts of Saudi Arabia in the field of apprenticeship education they need to strengthen and develop in various areas of apprenticeship where there are a number of challenges facing apprenticeship.

In the area of professional development, there are shortcomings in professional teacher's development programs so don't let them know their rights and professional methods to get, don't provide them with educational developments locally and internationally, don't let them know the characteristics and needs of students in the teaching phase they operate, do not cultivate the skills and procedural research foundations, not motivate them on creativity and innovation in their field, and cultivate positive attitudes towards the teaching profession, especially after they graduate from universities.

There is no doubt that the preparation and rehabilitation model of teachers required in the first place the imperative of education and professionalization has made a career as the rest of the other professions, and the introduction of recognizing or Professional license to practice the profession. The license is for practicing as a mechanism by which ensures educational system possessing a master of appropriate technical knowledge and skills required to achieve the objectives of the educational process and at the same time ensures broad public — which service recipient tutorials — protect the teaching profession of extraneous elements low efficiency.

License for a career education system also requires that the teacher enters the pre-service during the tests and interviews patrol the proven that it provides knowledge and knowledge, skill and ethics authorizing him or renew a license, and spite do not, because that would maintain the profession of education and progress. But it requires in turn raise the material and moral teacher. We could not ask the teacher everything we carry responsibility for everything and not give him something (Madkour, 2005).

This paper aims to address the following specific questions:

1. What is the reality of teacher's license in the KSA?
2. What is the most important experiences and models in the World?
3. What is the necessary requirement to start issuing teacher license in the KSA?

Research Objectives

The main objectives of this paper are to discuss the reality of teacher education and teacher licensing in K.S.A. and to discuss different country models for teacher licensing in order to gain insight on the best models to adapt in KSA.

Review of Related Literature

Teacher Education Program in Saudi Arabia and other Countries

There are no formally agreed-upon international standards for teachers that apply in every educational system worldwide, but the established national standards and certification processes do align on several key elements across systems. Furthermore, internationally comparative evidence shows that, despite significant differences in the implementation of teacher education worldwide (Menter et al. 2010), the norms and expectations for pre-service and new teachers are remarkably similar among educational systems in different countries (Ingvanson and Rowe 2008; OECD 2011; Villegas-Reimers 2003).

Teacher Education in Saudi Arabia

Teacher training programs in Saudi Arabia seek to provide training for an adequate supply of teachers, qualified in subject matter and method, because the government believes that the teacher is critical to the classroom processes and can maximize the use of the various facilities available such as curricula, textbooks, buildings, audio-visual aids, and laboratories and so on.

Elementary School Teachers (pre-primary and primary education) must hold at least Secondary School Diploma.

They are trained in junior colleges for two years and are awarded the Diploma for Junior College Training for Teachers. Students who pass with at least a B average can qualify for university entry and receive credit towards undergraduate courses.

Secondary School Teachers who teach at the intermediate and secondary levels either study for a Bachelor's of Education at university or complete a Bachelor's degree course followed by a one-year Higher Diploma in Education or study abroad. There are two types of Higher Diploma courses: The first trains new graduates to become intermediate or secondary level teachers. The second trains practicing (graduate) teachers in administrative techniques to become headmasters of intermediate or secondary schools. Women who have completed a Diploma for Junior College Training for Teachers are qualified to teach in intermediate schools. Colleges of Education provide four year courses leading to a Bachelor's of Arts (BA.) or Bachelors of Science (B.S.) in Education. Graduates are qualified to teach in secondary schools. Some colleges provide post- graduate training for women interested in a specialization. Science and mathematics teachers at the intermediate level are trained or retrained in teacher's colleges. Trainees must be holders of the High School Diploma or Secondary Teacher Training Institute Diploma. Completion of the three-year course leads to the award of the Teacher Proficiency Certificate and entitles holders to teach in intermediate schools.

Other requirements for teacher candidates include passing a personal interview and test of professional and specialized skills; being able to demonstrate knowledge of the uses and applications of computers in education and their specialization. They must also pass a comprehensive medical exam confirming their fitness, health, and freedom from mental illness and drug addiction. Finally, they must demonstrate knowledge of the duties of the teaching profession.

Teacher Education in Bahrain, Kuwait, Oman, Qatar and United Arab Emirates

In Bahrain, the Ministry of Education requires secondary-level math and science teachers to hold a bachelor's degree in either math or science in addition to a postgraduate diploma in education (Al-Awadhi 2008).

Math and science teachers in Kuwait must have a university degree (Al-Qattan 2008). Pre-service teacher training programs are offered by Kuwait University, the College of Basic Education, and the Open University. Although teacher preparation includes a practicum, pre-service teachers engage in an additional year-long practicum after their course of study; this includes evaluations by school supervisors and staff from their university or college. In-service teachers are also expected to regularly participate in professional development programs offered by the Ministry of Education's Training and Development Department (Al-Qattan 2008). Graduates of teacher training programs receive an initial two-year license ("Foundations license education for teachers", 2012). After these initial two years, qualified teachers receive a standard license. Within four years of receiving the standard license teachers must give a report describing their work in order to be qualified as "excellent". After six years of teaching, qualified teachers receive a professional license.

In Oman, teacher training is geared in one of two directions. The more general education, emphasizing pedagogy and specializations in English, the sciences, or the humanities, is called Cycle One and is open only to female teacher candidates. Cycle two places more emphasis on specialization and is for male candidates (Al-Maskari and Siler 2008). Teachers qualified specifically in math and science must hold a bachelor's degree in education with a specialization in math or science.

In Qatar, The process for awarding a professional license consists of three phases (SEC 2012). First, the teacher, education support professional, or school leader works with an appointed coach to collect, reflect on, and annotate a series of pieces of evidence of practice; this data is then collated into a portfolio of best practices and attached to the teacher's application for a full professional license. Second, the Attestation Committee, either at the school or at the national level, assesses the application or makes a recommendation to the Professional Licensing Office. Finally, that office either

approves or declines the application, and if appropriate awards a professional license.

Teachers in the United Arab Emirates must complete a four-year university program

At either an education college or a specialized college; those graduating from the latter require additional teacher training from the Ministry of Education before they teach. Some differences exist in the qualifications required for nationals and non-nationals. Teacher candidates who meet the minimum qualifications are interviewed by principals and subject supervisors, and then given an exam that includes sections on subject knowledge, pedagogical competence, personal competencies, and communication skills (Mohamed 2008).

Teacher Education in Palestine:

The purpose of (Abu Shaaban, Samara, 2009) study, is to present some ways to upgrade of the Palestinian teacher to suit the needs of technical and informational progress era. That study sought to answer the following questions:

1. What competencies that must be met with Palestinian teacher in the light of the information and technical age?
2. Ways to improve efficiencies of Palestinian teacher in the light of the information and technical age?

To answer the questions, the study followed the descriptive analytical method, as it was a review of the educational literature in this area to determine the competencies that must be met with Palestinian teacher in the light of the information age and technology, and take advantage of the educational literature and the results of previous studies to provide ways to improve those skills. The study found (11) adequacy of crisis the Palestinian teacher master in light of the era, it also provided a range of ways to improve the competence of each of the Colleges of Education, the Ministry of Education and the teacher of the Palestinian public education.

Teacher Education in Egypt:

Although the profession of teaching is taken into account like the "mother of professions", however; most students refrain from combining that profession. Job pressures, the necessity for the skilled appreciation, the decline of social look towards lecturers moreover as difficulties of labor conditions are the most reasons behind the students' refusal to affix teaching profession. The aim of that study is making an attempt to assist in choosing sensible and qualified people to affix teaching profession through suggesting tips to issue a professional license for academic teachers, supported reviewing literature and also the expertise of some pioneer countries in this field (Sweilem, Mohamed Mohamedghoneim, 2011).

Teacher Education in South Africa:

(Maphosa, 2014) aimed at his study to identify the professionalization of teaching at universities in South Africa, where the results of the study found that the professionalization of education depends on several aspects, such as upgrading the development of training programs for faculty, teaching and planning calendar, research and publication on issues of teaching and learning, specialization and discipline at work, the President of the University teacher's responsibilities.

Teacher Education in USA:

The United States is one of the first countries that applied the professionalization of education 1987 professional accreditation system applied to the teacher in all its mandates, so education license has become a necessary condition for every teacher to allow him to pursue a career in education. Many educators believe that this procedure contributed actively in the promotion of education in the United States and make them maintain regulatory, scientific prestige, social, cultural and military. United States has developed specifications and standards for teacher preparation and rehabilitation in colleges of education, including adopting a codified standards directed admissions policies in higher education and help in the selection of elements distinguished student enrolled in colleges of education. And also build standards and tools for recruitment and selection of teachers observing teaching license, calendar and ongoing development of performance

throughout their careers.

Teacher Education in England:

The study of (Whitty, 2006); aimed to reveal efforts of England in the professionalization of education and raising the professionalism of teacher. Study finds that career depends on several aspects: professional standards and training teachers, caring teaching license terms and specific rules, raise teachers ' information , skills and attitudes through ongoing professional development programs, increase the powers and prerogatives of teachers, teacher attention in society, the existence of professional ethics.

General comment on previous studies:

This study focused on teacher education or qualified teacher who can make a difference to student fulfillment, consisting of the type of program and support that it is used in the right place. Other factors such as the time spent on teacher training, subject matter knowledge, teacher's experience expectations of student achievement and the way of preparing for the lessons can be learned from the teacher education programs and can be developed by practicing teaching under supervision. The professional and academic training of teachers has a direct and positive relation on the status of their performance and then on the achievement of their students.

Illustrated by previous studies that the professionalization of education multidimensional manifold focuses on several areas, including:

- Teacher preparation and professional composition:

This is through the terms of the selection on sound scientific grounds based on grades, interviews and tests, and the presence of academic standards of teachers to students, and curricula keep pace with the developments and the developments of the times, and field training deepens the understanding of teachers of students to the nature of the educational process in schools, and encouraging teachers students to scientific research.

- Continuing Professional Development:

And carried out through the fruitful constructive cooperation between the Ministry of Education and higher education institutions, as well as a focus on programs outside of the schools in the training centers and professional development based on the school, based Continuing Professional Development on multiple methods, such as workshops, diplomas and degrees rehabilitation, scientific research, and supervision colleagues, and to increase the powers of teachers, brainstorming, and the guide and the router.

- License to practice the profession of teaching:

Where teachers are on leave and get a license to practice the profession of teaching, from the Ministry of Education, and will be for a specific period of time and renewed in accordance with specific conditions such as access to educational school qualifications, and attend training courses.

- Code of ethics for the teaching profession:

Where there is a profession code of ethics for the teaching profession be directed and a guide for the teacher, and helps him to control and regulate behaviors in all professional fields, and in his dealings with his superiors and colleagues at work, and in his dealings with students, and in communication with parents and community members.

- Professional standards for teachers:

Where it is building professional standards for teachers to identify the knowledge, skills and trends that must be comes initially teachers to practice the profession of teaching and thus improve education processes and student learning, and be a guide and mentor to those responsible in monitoring teacher performance and evaluate its performance and its improvement and development.

The Historical Background of Teacher License

Throughout history, governments have sought to regulate various occupations by enacting laws that define entry into the profession. A common way of regulating a profession is to require occupational licensing of individuals who wish to practice the trade. Kleiner (2000) defined occupational licensing “as a process where entry into an occupation requires the permission of the government, and the state requires some demonstration of a minimum degree of competency” (p. 191).

The rationale behind licensing is often based on consumer protection. Policymakers want to keep fraud out of the profession and ensure a minimum quality of goods or services for consumers. In theory, ensuring minimal quality helps the consumer by protecting them from potential hazards and by improving the average quality of goods or services received. Although consumer protection and improving quality are often cited as the primary reasons for licensing, it must be noted that the practitioners of the regulated trade also benefit from increased regulation.

In education, the terms licensing and teacher certification are often used synonymously. Ensuring quality teacher has traditionally been achieved through a certification requirement. Indeed, every country regulates who can enter the teacher labor force through some form of teacher certification (Walsh, 2001).

The Importance of Teacher Certification

A growing body of research links quality teaching with the student academic success. In a Texas study, nearly half the variation in test scores between white and African- American students was attributable to differences in teacher quality (Ferguson, 1991). Researchers in a Tennessee study found that teachers have a cumulative effect on student achievement. After three years of ineffective teachers, students scored at levels that were less than half of those of their peers who had benefited from more effective teachers.

Research evidence also indicates that board certified teachers are accomplished classroom practitioners. Results of the first study of the efficacy of National Board of Certified Teachers (NBCTs), completed in the year 2000, demonstrated that teachers who achieve board certification outperform their non-board certified peers on numerous dimensions of research-established indicators of teaching expertise, including knowledge of subject matter, ability to adapt instruction to different types of students, and capacity to develop challenging and engaging lessons (Bond, 2000).

Goldhaber and Anthony’s (2004) initial large-scale study of board certified teachers used a North Carolina database to assess the relationship between board certification and elementary level student achievement. This study found that board certification successfully identifies more effective teachers; that board certified teachers are more successful in increasing student achievement in mathematics and reading than are their non-board certified colleagues; and that NBCTs are the most successful with low performing students (Goldhaber & Anthony, 2004).

In addition, other positive research has shown positive impacts of NBCTs on their students’ achievement and significant improvement of NBCTs’ teaching practice as a result of the Board certification process (Vandervoort, Amrein-Beardsley, & Berliner, 2004; Cavaluzzo, 2004; Lustik& Sykes, 2006).

Development of Teacher Certification in Saudi Arabia

Although Teacher Certification in Saudi Arabia is not yet formally implemented, but the standards have been set and being ready for implementation. One of the standards that were formulated was the Teacher Tests which is conducted by the National Center for Assessment (NCA).They are developed to assess the candidate's knowledge and skills in relation to teacher professional standards. The tests are designed to help the Ministry of Education to identify those candidates who have reached the level of knowledge and skills required to perform satisfactorily as teachers. The teacher professional

standards targeted by the test are organized into four main domains as follows:

Domain 1: Professional knowledge (34 items). This domain focuses on the knowledge that teachers need to plan for quality student learning opportunities; how do teachers help the students' learning in the discipline(s) that they teach; and the curriculum and the resources that they provide to support student learning. Planning for learning includes the knowledge which is necessary to meet the standards in the other test domains.

Domain 2: Promoting learning (13 items). This domain describes the practices of effective teachers and the opportunities provide for the student learning process. It focuses on classroom engagement and the learning that teachers promote in their students, as well as the assessment practices to monitor student learning and provide helpful feedback. This domain emphasizes that teachers are responsible for promoting learning and developing the curricula that they are expected to teach.

Domain 3: Supporting learning (15 items). This domain focuses on an inclusive social environment of trust and respect, and an intellectually challenging environment with high expectations for learning and achievement. It is based on the idea that effective teachers establish a classroom environment that supports student's learning. As the previous domain, this domain of supporting learning also focuses on the teacher's practices.

Domain 4. Professional Responsibilities (5 items). This domain relates to teachers' professional responsibilities outside the classroom, namely (a) to establish a productive relationship with parents, (b) to contribute to effective school functioning, (c) to evaluate their own practice and engagement in professional learning, (d) to report on student progress, and (e) to fulfill other responsibilities in the school.

The item developers for the Teacher Test (TT) are selected annually by subject advisors at the NCA and the project manager of the respective teacher test based on qualification and expertise. There is also a group of items reviewers that decide whether the items meet the test standards. The NCA invites annually a number of qualified experts in the content of the teacher tests for participation in workshops dealing with the theoretical and practical aspects of writing test items. The experts are from different parts of the kingdom, work as high schools supervisors or university faculty, and must have a higher education degree and good experience in educational assessment.

Policy and Regulation of Teacher's License in Some Modern Countries

Teacher's Certification in the US

Following on the work of the National Board, a consortium of states, working under the support of the Council of Chief State School Officers, had created related standards for beginning teacher licensing that reflect professional teaching standards and incorporate student learning standards.

These assessments require teachers to document their plans and teaching for a unit of instruction, videotape and analyze their teaching, and collect and evaluate evidence of student learning. All of these pieces of evidence are then assembled and evaluated by highly trained raters who score them in a consistent manner against specific criteria that reflect standards of best practice.

The National Board for Professional Teaching Standards (NBPTS)

The National Board for Professional Teaching Standards was organized in 1987 as an independent, nonprofit organization with a mission to develop standards and assessments for advanced teacher's certification. Many states have openly acknowledged, with monetary incentives and other kinds of encouragement and recognition the board certification as a means for improving teacher quality and boosting student achievement.

Board Certification is also used as the basis for teacher evaluation, salary increases, and other forms of teacher

recognition, such as the selection of mentor or lead teachers.

National Board Certification, however, is reserved for experienced teachers. The certification symbolizes teaching excellence as measured by rigorous standards that are based on five core propositions:

- a) Teachers are committed to students and their learning.
- b) Teachers know the subjects they teach and how to teach those subjects to students.
- c) Teachers are responsible for managing and monitoring student's learning process.
- d) Teachers think systematically about their practice and learn from experience.
- e) Teachers are members of learning communities.

Currently, the NBPTS awards 24 certificates based on the discipline of the candidate and the age of students. To be awarded a certificate and designated a National Board Certified Teacher, a candidate must complete a four-part portfolio and six assessment center items.

However, Certification is not cheap. In addition to a \$65 application fee, candidates pay another \$2,500 for the assessment itself. It takes one to two years to complete the certification process.

A Continuum of Teacher Performance Assessments

Tier 1: Assessment for initial Licensing

- At entry to profession
- A common high standard of practice for all pathways (pre-service, internships, and alternate routes)
- Coupled with assessment of content knowledge
- Evidence used for program approval and accreditation

Tier 2: Assessment for Professional Licensing

- Following induction, prior to tenure
- Systematic collection of evidence about teacher practice and student learning
- Evidence also used to inform mentoring and professional development

Tier 3: Assessment for Advanced Certification

- After tenure or professional license
- Assessment of accomplishment as an experienced teacher
- National Board Certifications or state/local alternative
- Evidence used for differentiated compensation and leadership roles

Requirements of National Board Certification: Early Adolescence/Science portfolio entries

1. Designing Science Instruction

Written commentary (13 pages maximum) that provides a context for your instructional choices and describes, analyzes and reflects on student work and your teaching.

Three instructional activities and related instructional materials with two student responses attached to each of them. At least one of the activities must show connections to technology. Include any written feedback you provided to students. Document standards for the entry.

Standards

- I. Understanding Early Adolescents.
- II. Knowledge of Science.

- III. Instructional Resources.
- VII. Understanding Science Pedagogy.
- XIII. Reflective Practice.
- IX. Contexts of Science.
- X. Assessment.

2. Probing Student Understanding

Written commentary (11 pages maximum) that provides a context for the video-recording discussion and describes, analyzes and reflects on the discussion, student understanding, and your teaching.

One video recording (20 minutes maximum) that shows you engaging students in an initial discussion of a new science concept. The focus of this discussion should be on eliciting students' initial understandings relevant to the instructional sequence. While there may be periods in the video recording when students are engaged in independent or collaborative work, the majority of the video recording should focus on the teacher and his/her students involved in a whole-class discussion.

Standards

- I. Understanding Early Adolescents.
- II. Knowledge of Science.
- IV. Diversity, Equity and Fairness.
- V. Engagement.
- VI. Learning Environment.
- VII. Understanding Science Pedagogy.
- VIII. Science Inquiry.
- IX. Contexts of Science.
- XIII. Reflective Practice.

3. Inquiry through Investigation

Written commentary (12 pages maximum) that provides a context for the video-recording discussion and describes, analyzes, and reflects on the discussion and students' development of inquiry skills.

One video recording (20 minutes maximum) that shows you engaging students in a discussion that focuses on the interpretation of data that have been collected during the course of the investigation. The discussion may take place in the context of small groups or whole class, or a combination of both.

Standards

- I. Understanding.
- II. Knowledge of Science.
- IV. Diversity, Equity and Fairness.
- V. Engagement.
- VI. Learning Environment.
- VII. Understanding Science Pedagogy.

- VIII. Science Inquiry.
- IX. Contexts of Science.
- X. Assessment.
- XIII. Reflective Practice.

4. Documented Accomplishments: Contributions to Student Learning

Description and analysis (8 accomplishments, 10 pages maximum) of activities or accomplishments that clearly and specifically describe why they are significant in your teaching context and what impact they had on student learning.

Documentation (16 pages maximum) that supports the accomplishments you have chosen to describe.

A reflective summary (2 pages maximum) that reflects on the significance of your accomplishments taken together and your future plans to improve student learning.

Standards

- XI. Family and Community Outreach.
- XII. Professional Collaboration and Leadership.
- XIII. Reflective Practice.

Assessment Components

Exercise 1: Data Analysis

Teachers will demonstrate sound principles of data analysis. Teachers will read a student-designed experiment, study a student collection of data, and analyze a student conclusion concerning the experiment.

Exercise 2: Interrelationships

Teachers will show their knowledge of interrelationships that exist within science. Teachers will give explanations of two concepts and explain the interrelationships.

Exercise 3: Unifying Concepts

This exercise asks teachers to focus on their knowledge of unifying concepts. Teachers will describe a major idea in science, explain a concept from each of the major sciences, and relate the concepts to the major idea.

Exercise 4: Change Over Time

Teachers will demonstrate knowledge of change that occurs over time. Teachers will describe a concept from one of the major sciences, and explain the mechanisms involved in a change over time involving that concept.

Exercise 5: Student Misconceptions

Teachers will use their knowledge of science to identify student misconceptions and to appropriately address the misconception. They will identify student misconceptions in a sample of student work, describe the scientific content needed to correct the misconceptions, and briefly explain how to pedagogically address the misconceptions.

Exercise 6: Science, Technology, and Society

This exercise focuses on the teachers' knowledge and understanding of science, technology, and society issues. Teachers will describe a science, technology, and society issue and discuss the scientific knowledge that students need to know in order to understand the issue.

* Note: This material can be found on the National Board for Professional Teaching Standards website, www.nbpts.org, along with other pertinent information explaining the process of the Early Adolescence/Science

certificate.

A number of recent studies have found that the National Board Certification assessment process distinguishes among teachers who are more and less effective in raising student achievement. Large-scale studies in Florida and North Carolina found that, controlling for a host of other student and teacher characteristics, students made significantly greater gains if their teachers were National Board Certified. Similarly, researchers in the Los Angeles Unified School District found that the positive effects of board-certified teachers grew even larger when examined using the stronger methodology of randomized assignment of classrooms to teachers. (Sanders, Ashton, & Wright, 2005; Goldhaber and Anthony, 2007)

Alternative Routes

Alternative routes to certification typically allow teachers to enter the classroom by postponing or bypassing many of the criteria required by traditional teacher preparation programs. All require teachers to hold a bachelor's degree; 80 percent require teachers to demonstrate subject matter knowledge by completing coursework or passing an exam, or both (Humphrey, 2007). Many alternative certification programs have both pre-service and in-service requirements. Some require as little as two weeks of pre-service preparation, while others effectively require an academic year. More typically, pre-service ranges from four to twelve weeks during the summer before the new teacher enters the classroom and often includes pedagogy, methods of teaching, and field experiences.

A brief description of several alternate route programs illustrates some of the differences. Texas offers nearly 100 programs, of which I-Teach Texas is typical. A statewide web based program, it requires no onsite pre-service meetings. Eligible applicants must have a bachelor's degree with at least a 2.5 grade point average and must prove competency in reading, writing, and math either through coursework or minimum scores on standardized tests such as the ACT, SAT, or GRE. Once accepted, candidates have two years to meet the requirements for a standard teaching certificate. They must first complete a ten-part computer module, after which they are eligible to begin teaching. Finally, they must pass certification tests, including the appropriate subject-area test, complete the two-semester field experience, and secure recommendations from their mentor and campus administrator. (Baines, 2006).

The New York City Teaching Fellows Program, established in 2000, is the largest alternative route in the country. Applicants must have a bachelor's degree with at least a 3.0 grade point average. The summer before the school year begins, fellows must attend an intensive seven-week training session in which they observe and assist veteran teachers. Fellows must pass the basic skills and content-specialty certification exams before they can begin teaching. Once assigned a teaching position, they must begin an approved master's degree program that will qualify them for continuing certification in their subject area. Fellows now supply about 25 percent of new hires in New York City.

Qatar's Education License Requirements

Qatar's Supreme Education Council (SEC) is the government agency responsible for conducting the professional license system for teachers. The SEC's National Professional Standards for Teachers details 12 standards in which teachers must show competence. It envisages three license levels: Entry level, Proficient level and Advanced Skill level. To receive a full level license, teachers will have to go through additional steps in the registration process. Full licenses must be renewed or upgraded every three years.

Teacher's licensing in Japan

In October 2007, three education bills, including the Revised Teacher's License Law were approved by the Central

Education Council in February and submitted to the Diet. The purpose of the Revised Teacher's License Law was "to ensure teachers systematically acquire up-to-date knowledge and skills to maintain the professional competencies necessary for today's educators, teach with confidence and pride, and gain respect and trust from the public." Until this revision in the Teacher's License Law, teachers in Japan were granted a permanent license after completing their induction training. However, due to this revision, teachers' licenses are now issued for ten years.

In addition, in order to renew the license, teachers are required to take license renewal courses totaling over thirty hours of instruction over a two year period prior to the date of license expiry.

Professional Certification of College and University Faculty

Should college and university faculty and highly qualified teachers become Nationally Certified? The answer is a resounding YES!

One dictionary definition of professionalism is "the skill, competence, or character expected of a member of a highly trained profession."(Dictionary.com)

Certification is a process that validates an individual's qualifications for a specific field of professional practice. It demonstrates to employers, clients and peers what the individual knows and is able to do. It signifies commitment to continued excellence in professional practice. In addition, it increases visibility, builds credibility, provides a goal for professional achievement and validates expertise for the individual to those outside the field."

Why should college faculty and highly qualified teachers be certified? Raising the standards of teaching profession is good for everybody. As a nationally certified teacher, you will be standing for something bigger than yourself; you will be part of a plan that has a national organization behind it, an organization whose goal is the overall betterment of the teaching profession in every possible way, an organization that promotes the highest standards in teaching. When one is nationally certified, one becomes part of that goal. College faculty status implies that your teaching capabilities have met a high standard, and your diploma sat test to your education. Displaying your certificate proves that you care about your chosen profession and your own role in it.

Analysis of the Similarities and Differences in Teacher's License

All the countries mentioned require that teachers must have a university degree and that they pass a teacher certification exam. There are some little differences in the way exams are conducted but nevertheless, all countries have almost the same objectives or rationale for the licensure exams, that is to test the candidate's knowledge and skills in relation to teacher's professional standards. In my opinion, the best model is that of the U.S. because the certification process is very much extensive and rigorous. However, several studies have proven its effectiveness in assessing teachers' quality.

Conclusion

Certification or licensing through examination is so far the best way to determine quality of a teacher. Almost all countries are the same with regards to the standards set, but the U.S. model is considered as the best model because of its extensiveness and rigorous requirements, and most important of all, the many research works that proved its effectiveness in assessing quality teacher.

Recommendations for the improvement of higher education

The author suggests that Teacher Tests or Licensure Exams for Teachers be implemented soon, then later on research studies should be conducted to prove its effectiveness. Some country models for teacher licensing have been discussed and hopefully, the concerned education authorities from KSA would get ideas from these particularly from that of the U.S. National Board for Professional Teaching Standards which have proven effective based on the many studies conducted about it.

The recommendations of the study:

In light of what has been presented about the reality in the field of apprenticeship education, and some international experiences in this field, and the benefits from the global experience in the development of apprenticeship education in Saudi Arabia, the study recommends the following:

1. In the field of teacher preparation:

- Develop the terms of admission for students enrolled in educational colleges so that they have signs or distinct degrees in BA / general diploma and pass interviews and tests stomach capacity for this purpose.

- Adoption of practicing the profession of teaching in schools urgently licensing system.

- Commitment to appoint graduates of educational colleges to encourage students to attend these institutions.

2. In the field of professional development for teachers:

- Activation of professional development based on the school and determine a working group or specialized committee will be responsible for all professional development programs for teachers within the school.

- Identify specialized programs for new teachers and teacher's experts.

- Post teacher training institutions in the professional development programs for teachers at the Ministry level, educational or school departments of planning, implementation and assessment.

- Establishment of unions and professional associations of teachers involved in all the activities and programs of professional development for them at various levels.

3. In the code of ethics:

- Building code of ethics for the teaching profession. Concentration of the ethical charter for the teaching profession to the professional and ethical aspects of the deal and relations with students and colleagues, administration, parents and the local community.

- Charter to strengthen the moral integrity, honesty and fairness, transparency, dignity and interest and confidence values. Ethical Charter respect for human dignity and cultural and spiritual values and development, freedom, social justice and democracy.

4. In the field of education law:

- The existence of a special law regulating the education profession and adjusts performance and work is proceeding where the proceedings.

- Education system interesting new teachers' experts and teachers, teacher training programs and graduate programs.

- The inclusion of education and the duties and responsibilities and roles of the law of the teacher in the educational process.

- Education system focuses on the formation of unions or professional associations of teachers represented by the responsible authorities, and defend their rights, and provide them with multiple services.

- Education Act interesting evaluates the functionality of the teacher in terms of its objectives and its importance

and its stages, and its participants, and standards of the evaluation, and the results of the evaluation.

5. In the field of professional standards for teachers:

- The existence of professional standards for teachers in Saudi Arabia involved in the construction of the Ministry of Education, universities and body evaluating education.
- Inclusion of standards of knowledge, skills and values inherent in the teaching profession, the goals and aspirations of the profession.
- Standards focus on the development of a common vision for the teaching profession, and be a guide and a wave of actions and moral value to it, and supports the confidence of the local community there.
- the inclusion of teacher standards in five different fields such as: curriculum content, and education planning, design, and strategies and methods of teaching, communication and information technology, to provide a safe learning environment, and diverse styles calendar, and collaboration with colleagues, administration and parents Alamo t and the community, professional growth and continuing professional development and the ethics of the teaching profession.

The proposed actions:

- The announcement of a time plan for the application
- Setting conditions, most notably to obtain an academic qualification education, and appreciation of, a certain rate, and pass a certified test on professional standards for teachers, tests efficiencies of teachers, which is currently located, in addition to the requirement of the ability and competence in teaching; through the process of supervising the teachers' ITR within a specified period
- Targeting a certain percentage of the teachers, and then expands on the grant of the license
- Start racing the new teacher on the primary license; that the validity of the license will be for the old teacher ranging from three to five years. "

The minimum license three years, and a maximum of five years; even the teacher moves to the next level. "

REFERENCES

Professionalism definition (2015). <http://www.dictionary.com>.

Abu Shaban, Samar and Samara, Rana (2009). Ways to improve Competency Palestinian teacher in the light of the information age and technology, research presented Educational Conference: Palestinian teacher between realities is hoped, big conference hall, the Islamic University of Gaza, Palestine.

Akiba, M., LeTendre, G. K., and Scribner, J. P. (2013). Teacher quality, opportunity gap, and national achievement in 46 countries. Educational Researcher, 37(7), 369–387.

Al-Awad KI (1998). Education Future in Saudi Arabia: Indicators and Prospects. Riyadh: Ministry of Education, Centre for Education Development.

Al-Awadhi, H. (2008). Bahrain. In I. V. S. Mullis, M. O. Martin, J. F. Olson, D. R. Berger, D. Milne, and G. M. Stanco (Eds.), TIMSS 2007 encyclopedia: A guide to mathematics and science education around the world, 2: A–L (pp. 85–96). Chestnut Hill, MA: TIMSS & PIRLS International Study Center, Boston College.

Algarfi, A. (2010). Teachers' and pupils' perceptions of responses to cooperative learning methods within the Islamic culture courses in one secondary school in Saudi Arabia. Unpublished dissertation (PhD), University of Southampton, p.8.

Alhammed, M., Zeadah, M., Alotaiby, B., and Motawaly, N. (2004). The learning in Saudi Arabia: Sight of the present and preparing for future. Riyadh: Alrosched. (In Arabic).

Al-Maskari, Z., and Siler, R. (2008). Oman. In I. V. S. Mullis, M. O. Martin, J. F. Olson, D. R. Berger, D. Milne, and G. M. Stanco (Eds.), TIMSS 2007 encyclopedia: A guide to mathematics and science education around the world, 2: M–Z (pp. 453–461). Chestnut Hill, MA: TIMSS & PIRLS International Study Center, Boston College.

Al-Mousa, N. A. (2010). The experience of the Kingdom of Saudi Arabia in mainstreaming students with special educational needs in public schools (a success story). The Arab Bureau of Education for the Gulf States, Saudi Arabia: Riyadh.

Al-Qattan, E. (2008). Kuwait. In I. V. S. Mullis, M. O. Martin, J. F. Olson, D. R. Berger,

Baines, L. A. (2006). Deconstructing teacher certification. Phi Delta Kappan, 88(4), 326-328.

Batterjee, A. A. (2011). Intelligence and education: The Saudi case. Mankind Quarterly, 52, 2, 133-190.

Bell, Sherrilee. (2011). Professionalism Through the Eyes of Female Elementary Teachers in Ontario, Thesis Submitted to the Faculty of Education in conformity with the requirements of the Degree Master of Education, Ontario: Queen's University.

Bond, L., Smith, T. W., Baker, W. K., and Hattie, J. A. (2000). The certification system of the National Board for Professional Teaching Standards: A construct and consequential validity study. Greensboro, NC: Center for Educational Research and Evaluation.

Burghes, D. (2011). International comparative study in mathematics teacher training: Enhancing the training of teachers of mathematics. London: CfBT Education Trust, p.9.

Cavaluzzo, L. (2004, November). Is National Board Certification an effective signal of teacher quality? Alexandria, VA: CAN Corporation.

CIA, The World Factbook (2002): Saudi Arabia - Population

D. Milne, and G. M. Stanco (Eds.), TIMSS 2007 encyclopedia: A guide to mathematics and science education around the world, 1: A-L (pp. 339-345). Chestnut Hill, MA: TIMSS & PIRLS International Study Center, Boston College.

Ferguson, R. (1991). Paying for public education: New evidence of how and why money matters. Harvard Journal on Legislation, 28, 475.

Foundations License Education for Teachers in Schools: Kuwait and the Arabian Gulf (2012). <http://www.alabduljaleel.com/word1.htm>.

Goldhaber, D., and Anthony, E. (2004). Can teacher quality be effectively assessed? Seattle, WA: Evans School of Public Affairs and Urban Institute, University of Washington. Retrieved March 29, 2007, from [\[http://www.cia.gov/cia/publications/factbook/geos/sa.html\]](http://www.cia.gov/cia/publications/factbook/geos/sa.html)

Goldhaber, D., and Anthony, E. (2007). Can teacher quality be effectively assessed? National Board certification as a signal of effective teaching. Review of Economics and Statistics, 89, 134-150.

http://www.urban.org/UplaodedPDF/410958_NBPTSOutcomes.pdf.

Humphrey, D.C. and Wechsler, M. (2007). Insights into alternative certification: Initial findings from a national study. Teachers College Record, 109I (3), 483-530.

Ingvarson, L. and Rowe, K. (2008). Conceptualising and evaluating teacher quality: Substantive and methodological issues. Australian Journal of Education, 52(1), 5-35.

Kleiner, M. M. (2000). Occupational licensing. Journal of Economic Perspectives, 14(4), 189-202.

Krieger, Z. (2007). Saudi Arabia puts its billions behind western-Style higher education. Chronicle of Higher Education, 54, 4.

Lustik, D., and Sykes, G. (2006, February). National Board Certification as professional development: What are teachers learning? Educational Policy Analysis Archives, 14(5), 1-43. Retrieved March 29, 2007, from <http://epaa.asu.edu/epaa/v14n5/>.

Madkour, Ali Ahmed (2005). Future teacher: better performance, i (1), Arab thought dar, Cairo.

Maphosa, Cosmas; Mudzielwana, Ndileleni P. (2014). Professionalization of Teaching in Universities: A Compelling Case, International Journal of Science Education, 6 (1), 65-73.

Menter, I., Hulme, M., Elliot, D., and Lewin, J. (2010). Literature review on teacher education in the 21st century. Edinburgh: The Scottish Government.

Mohamed, Z. (2008). Dubai, United Arab Emirates. In I. V. S. Mullis, M. O. Martin, J. F. Olson, D. R. Berger, D. Milne, and G. M. Stanco (Eds.), TIMSS 2007 encyclopedia: A guide to mathematics and science education around the world, M-Z (pp. 667-675). Chestnut Hill, MA: TIMSS & PIRLS International Study Center, Boston College.

OECD (2011). Building a high-quality teaching profession: Lessons from around the world. Paris: OECD.

Onsman, A. (2010). Dismantling the perceived barriers to the implementation of national higher education accreditation guidelines in the kingdom of Saudi Arabia. Journal of Higher Education Policy and Management, 32, 5, 511-519.

Rugh, W. A. (2002). Education in Saudi Arabia: Choices and constraints. Middle East Policy, 9, 2.

Sanders, W., Ashton, J., and Wright, S. P. (2005, March). Comparison of the effects of NPTS certified teachers with other teachers on the rate of student academic progress. Report prepared for the National Board for Professional Teaching Standards. Retrieved March 29, 2007, from http://www.nbpts.org/resources/research/browse_studies?ID=183.

SEC [Supreme Education Council] (2012). Professional license for teachers and school leaders: Constructive step to improve the teacher's competence and performance. Doha: SEC.
<http://www.sec.gov.qa/En/Media/News/Pages/NewsDetails.aspx?NewsID=3225>.

Sweilem, Mohamed Mohamed Ghoneim (2011). Professional license for the teacher in Egypt: Vision proposed in the light of some international experience, Education -Egypt, 14, p. 34, pp. 63-113.

Vandervoort, L. G., Amrein-Beaerdsley, A., and Berliner, D. C. (2004). September 8). NBCTs and their students' achievement. Education Policy Analysis Archives, 12(46). Retrieved March 29, 2007, from <http://epaa.asu.edu/epaa/v12n46>.

Villegas-Reimers, E. (2003). Teacher professional development: An international review of the literature. Paris: UNESCO International Institute for Educational Planning.

Walsh, K. (2001, November). Teacher certification reconsidered: Stumbling for quality. The Abell Foundation. Retrieved from http://abell.org/pubsitems/ed_cert_rejoinder_1101.pdf

Whitty, Geoff. (2006). Teacher professionalism in a new era, University of London: Institute of Education, 1-17.

مناهج الدول في تأهيل المعلمين في المملكة العربية السعودية

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ملخص

يتفق الآباء والممارسين وصناع السياسات على أن المفتاح لتحسين وتطوير كلا من التعليمين العام والخاص على حد سواء هو عن طريق تعيين المعلمين المؤهلين تأهلاً عالياً في جميع الفصول الدراسية. ولكن الهدف الأكثر صعوبة هو كيفية قياس جودة أداء المعلمين تجريبياً. ولهذا يشترط أحد المقاييس المقترنة حصول المعلم على الترخيص أوشهادة المؤهل الدراسي. حيث أصبحت شهادة المؤهل الدراسي حالياً عنصراً حتمياً لنظم التعليم القومية في جميع أنحاء العالم. والهدف الرئيس من هذا البحث هو استعراض رخصة أو شهادة المعلم من بلدان مختلفة، وتقديم أفكار أو اقتراحات لصانعي السياسة في المملكة العربية السعودية فيما يتعلق بمعايير شهادة أو ترخيص المعلم التي يمكن أن تدخل حيز التنفيذ عاجلاً في المملكة خلال المستقبل القريب.

الكلمات الدالة: جودة المعلم، شهادة المعلم، رخصة المعلم، التحديات الراهنة التي تواجه التعليم في المملكة العربية السعودية، معايير الترخيص المهنية.

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