Singapore’s High Quality Educational Performance as Reflected in its Teacher Evaluation System: A Benchmark for Educational Reform in the GCC

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ABSTRACT

This paper intends to focus on Singapore’s experience to overhaul their teacher evaluation system to sustain teaching excellence. Singapore has become a global hub of finance, trade and information who had extensively and successfully invested in its human resource, listing as one of the top country having a world-class educational system. Just as Singapore developed its system by examining the best practices of others countries, the GCC can also learn from Singapore. By examining the different approaches Singapore has undertaken, we can refine and improve our own system in the GCC. A holistic and comprehensive approach should be undertaken in designing a responsive teacher evaluation system - starting from teacher education programs, recruitment and maintaining a pool of teachers who are committed to the teaching profession.

Key words: GCC, Teacher evaluation, Singapore, Evaluation system, Profession.
INTRODUCTION

The Gulf Cooperation Council (GCC) countries had experienced an unprecedented economic growth over the last decade and continue to exhibit steady growth. To ensure that it is able to sustain its economic growth and attain global competitiveness, providing quality education had been regarded as a critical element and cornerstone to economic progress and its key role in its overall development. Recognizing the critical role of education, the GCC region had allocated since 1980’s, about twenty percent (20%) of public spending and nearly five percent of Gross Domestic Product (GDP) to education, and is expected to experience a recurring expenditure of about US$150 billion in education over the next couple of years (Alpen Capital, 2014).

Singapore’s education system is the product of a distinctive, even unique, set of historical, institutional and cultural influences. These factors go a long way to help explain why the educational system is especially effective in the current assessment environment, but it also limits how transferable it is to other countries (https://theconversation.com/why-is-singapores-school-system-so-successful-and-is-it-a-model-for-the-west-22917).

Educational Reform in the GCC: A Crucial Step

GCC’s generous expenditure on education has been comparable to many developed countries; however, it yielded limited returns on investments as indicated by two important indicators:

a) The unemployment rate for the GCC was the highest in the world at 8.8% in 2009 compared with a global rate of 5.9% in 2009 (Alpen Capital, 2010). Skill mismatch was pointed out as
the main reason for high unemployment rate (Gonzalez, 2010). The educational reform to create a generation of skilled nationals who are targeted to replace the expatriate labor force in the GCC is still far from being attained (Maroun, 2008).

b) The literacy rate in reading, mathematics and science is shown to be below average in performance for UAE and Qatar as indicated in the (2009, 2012, 2015, and 2018) results of OECD Program for International Student Assessment (PISA) - the world’s premier yardstick for evaluating the quality, equity and efficiency of school systems. Despite the efforts and substantial investment made over the past decades in developing educational systems, yielded low quality of learning outcomes when compared to other countries at similar income levels. (Refer to Appendices A-C).

The challenge lies ahead – in order that the GCC can compete in a fast changing global market it should seek to continually improve and harness its human potential! Nurturing excellence in mathematics, reading and science is considered crucial for countries to compete in a knowledge – based global economy (OECD, 2014). Providing quality education has to take a leading role as it serves a powerful predictor of the economic and social wellbeing of the GCC. Sustainability and competitiveness is dependent on a knowledge-based economy, and GCC fully realizes that it can’t rely on oil forever. Improving quality in education in the GCC requires reorienting education, and the teacher’s role becomes crucial – educational reforms would be decisively dependent on the quality of teachers. The move to rethink how to evaluate a teacher’s performance and explicitly tie assessments of teacher performance to student achievement marks an important shift in thinking about teacher quality.

Ridger, N & others. (2017) indicated that the final challenge for the United Arab Emirates is one that has major political and economic consequences in general. This challenge is to
establish a national body capable of developing and revising the national curriculum. This body could consist of local and international experts in curricula who are able to produce and review proposed changes to the curriculum. The Ministry of Education and the Abu Dhabi Education Council have relied heavily on foreign experts to lead curriculum reform initiatives. It is worth noting that it is easy to import experts and consultants who have tendencies and more experience in the curriculum in the short term, but such an arrangement is not sustainable in the long term, because it excludes citizens and state experts from the process, and thus does not allow them to acquire the skills and expertise that would allow them to develop curricula without the need for the help of foreign experts. By reducing reliance on foreign expertise and providing better training for Emirati citizens and local experts, the state will be able to build local capabilities and capabilities that are qualified in it. Be able to develop the curriculum in the correct and required manner. This process should start with the UAE being more cautious when "borrowing" curriculum reforms from abroad. Usually, the country relied on experts from the United Kingdom, the United States of America and Australia, which are the most common countries to import the majority of its curriculum. However, these three countries performed relatively poorly on TIMSS and PISA. Indeed, in 2015, students from the United States of America were among the students who achieved the lowest results on the PISA test compared to other countries in the world, as the results indicated that they achieved the 38th place. Accordingly, in order to create better and more comprehensive curricula, the United Arab Emirates may have to explore the possibility of benefiting from the experiences of countries that have achieved good results in. In addition, the state should make use of countries that rely on internal comparison, OECD (PISA) evaluation.
Singapore’s High Performing Education System: A Close Look

An Overview. Singapore’s educational reform underwent complex and continuous process for four decades. Singapore is a small island city-state that became self-government in 1959, inheriting a loose “patchwork” of mainly vernacular schools, having uneven quality of instructional materials and infrastructure which resulted to high drop-out rates and poor literacy outcome. At that state, Singapore needed to attain economic survival and self-sufficiency – did not have enough land, or natural resources like oil or gas. The only resource that Singapore had was its human resource, and to realize its economic goal, it needed to invest in a solid education for its human resource.

Singapore revamped its teacher performance to sustain teaching excellence. As a result of deliberate policy choices, Singapore consistently rated from (2009 to 2018) as among the top countries in the world on international rankings of student achievement in science, math, and literacy. Refer to Appendices A-C. Singapore has carefully built a teacher performance management system designed to promote and enhance teacher excellence. A key element stands out in their excellent performance: the development of a comprehensive system and thorough use of performance-linked “competencies” to measure, reward, and develop teacher performance (refer to Appendix D). The Singapore competency model for teaching consists of one core competency, “Nurturing the Whole Child,” and four other major competency clusters, “Cultivating Knowledge,” “Winning Hearts and Minds,” “Working with Others,” and “Knowing Self and Others.” Each cluster has two to four competencies. For example, “Cultivating Knowledge” has four key competencies: subject mastery, analytical thinking, initiative, and teaching creatively. Each level includes descriptions of the specific behaviors a teacher should
demonstrate at a particular level of mastery. This competency model is used in conjunction with the achievement of performance goals at each stage of employment.

**Hiring and training of aspiring teachers with attractive compensation**

All teachers are hired prior to their training, under one institution which is the National Institute of Education (NIE) to achieve a uniform standard and control the number of students each year. Teachers can enter training at different stages: right after they complete secondary school (equivalent to the end of 12th grade in the United States), after they complete a university degree, or as a midcareer change. In initial screens, the Ministry of Education considers only candidates with relatively high test scores who graduated in the top third of their high school class.

In the course of their training, they are given extensive feedback, and at the end of their fourth year, they are sent to teach in a school for 10 weeks under the direction of their NIE supervisor and mentor teachers who conduct frequent observations, hold ongoing discussions about their performance, and give the teacher candidates specific assignments to improve their craft.

The incentive structure was restructured to attract the best and brightest students to consider a teaching career. Teaching quality begins with investments in teacher’s paid pre-service education which include monthly competitive salaries equivalent to that of a beginning engineer or accountant ($30,000 - $50,000 per year). For a graduate mid-career entrant salaries are adjusted based on previous working experiences.
Multiple Opportunities for Career Advancement

There are three education tracks, each with several levels of advancement: 1) teaching – for a career focused on excellence in teaching; 2) leadership – for a career in school administration; and 3) specialist – career in curriculum and instruction design, educational psychology and guidance, educational testing and measurement, educational research and statistics. All of these tracks have salary grades that are designed to provide all educators (teachers, specialists, and leaders) with an incentive to advance as far as they can. For example, a senior teacher, can make a salary equivalent to a school vice principal, so excellent teachers do not have to leave teaching to earn higher pay. Refer to Appendix E.

Setting Annual Competency Achievement Targets

All teachers begin the year by developing their annual performance goals, which they record on a standardized evaluation form. This standard evaluation form consisting of: 1) Goals which specifies work goals that include competency targets and other performance goals; 2) Competencies indicating current competency ratings; 3) Personal Development plans defining the training and development plans; and 4) Feedback which includes reviews and comments by the teacher and supervisor regarding work performance, and competencies as well as additional comments or review by a second evaluator. According to the ministry, these performance goals address both the “what” and “how” of performance. Although accomplishing work targets, such as improvements in student learning, is critical, teachers and their supervisors also set individual performance goals for reaching higher levels of competence, which captures how teachers are able to achieve these work targets.
Once teachers have completed a draft of their standardized evaluation form—which they refer to as a “work review form”—they meet with the supervising officer at their school to make sure their goals and plans align with departmental, school, and national goals. At this meeting, the supervisor and the teacher also review and agree on the professional development and internal support that the teacher will need to meet her goals.

**Matching Each Teacher to a Career Path**

In order to determine which career track is best suited for a teacher, work targets and demonstrating increasing levels of competencies are utilized as basis for the decision. On an annual basis, teachers use their year-end review forms to indicate their career aspirations. Supervisors also have an opportunity to weigh in on the direction they think a teacher’s career should take to determine their “current estimated potential” based on the review form.

**Determine annual bonuses**

As part of the year-end review, supervisors must note, in narrative form, how well teachers performed during the year which describe teacher’s strengths, unique skills, areas of improvement on both the competency ratings and on other work performance goals, work-related challenges, and their “current estimated potential.” These narratives, along with the teacher’s own written self-assessment, are used to determine whether individual teachers will receive a performance bonus and how much they will receive. In order to make the process as fair and impartial as possible, the ministry assigns a “countersigning officer,” a person at a higher grade than the teacher being evaluated, to provide additional perspective on the teacher’s performance. These bonuses typically range from a half-month’s salary, for performance that exceeds expectations in a few areas, to four months’ salary, for outstanding performance in multiple
areas. Approximately 5 to 10 percent of the teachers across the country are typically deemed outstanding, thus qualifying for the top bonuses. At this meeting, the panel also decides whether to recommend individual teachers for advancement within a particular track or to move, if they wish, to a different track.

**Salient Features Singapore’ Teacher Evaluation System**

What can we learn from Singapore? No teacher evaluation system or model can fully apply or “fit” in ensuring quality education, however, certain principles and practices that have proven effective for Singapore may be worthy of consideration or attention by the GCC to maintain its competitiveness in the global market.

1. As one prepares for a major league it puts much attention into scouting and drafting its players. Following this principle, Singapore puts much effort and careful analysis into selecting its teachers by focusing on active recruitment of teachers as opposed to waiting for prospective teachers to apply. Further, prospective teachers are selected from the top one-third of their secondary school class – placing importance to academic proficiency, with a commitment to the profession and to serving the nation’s diverse students. Singapore also actively recruits mid-career candidates, believing their experience in the world of work is valuable to students.

2. Teaching standards are already introduced to teacher candidates during their teacher preparation program by focusing on key knowledge, skills, and practices that they will are expected to demonstrate in the classroom. Incorporating the teaching standards into the preparation program curriculum help teachers develop a sense of how the various teaching standards will fit into their own practice when they are in the classroom. Having
a standard that adequately explicate the work of teaching is one of the criteria in building a comprehensive teacher evaluation system (Isore, 2009).

3. Teachers do not doubt the validity and relevance of the evaluation tool because the model had been extensively researched or based on outstanding teachers in Singapore. The model used was not just adapted from any model from any country and there is no reason to question its applicability in their own experience as teachers. Refer to Appendix E.

Further, ensuring equity fairness and common understanding in teacher evaluation, requires that standards should build upon what is known about effective teaching practices which depicts the actual environment, describe what exemplary performance looks like, and serve as a guide for developing the related components (Goe, Biggers and Croft, 2012).

4. Singapore recognizes that the cornerstone of quality education rests on the quality of its teachers. With an attractive incentive structure and compensating teachers based on their performance, and multiple opportunities for career advancement, Singapore is able to attract and retain the best teachers in the profession.

5. The formative value of Singapore’s evaluation system is given utmost importance – continuous improvement of teaching practice from their pre-training and throughout their teaching career by identifying strengths and weaknesses for further professional development:

a. The work review plan clearly outlines the performance goal areas in which teachers need to focus and identify the competency levels they need to reach to achieve these performance goals.
b. Discussions with supervisors about competence and other performance gaps are accompanied with immediate recommendations where they can get additional support to attain their goals.

c. Throughout the year, supervisors monitor each teacher’s progress on their competency goals and other work performance goals.

d. Informally, supervisors frequently observe and confer with teachers, providing coaching and guidance when needed. Formally, supervisors meet with teachers for midyear and final reviews.

e. Teachers are heavily involved in identifying and setting their own goals, which gives them a sense of control over their own professional careers.

f. Evaluation became a routine, but an important part of their professional life by engaging in reflective practice – studying his or her own teaching methods and sharing experience with colleagues in schools.

CONCLUSION

Singapore has designed a teacher evaluation system which served as a vital step in their efforts to improve the effectiveness of teaching and learning. Singapore deliberately put its effort to come up with a comprehensive teacher evaluation system that responded to the demands for educational quality, the enhancement of teaching practices through professional development, and the recognition of teacher knowledge, skills and competencies. Singapore’s remarkable achievement in achieving the delivery of quality performance consistently has validated researches proving high-quality teachers.
RECOMMENDATIONS:

Learning from Singapore’s experience as benchmark for designing an effective evaluation system in the GCC and which is responsive to the demands of a knowledge-based economy, the following recommendations are made:

1. A holistic and/ comprehensive approach should be undertaken in designing a responsive teacher evaluation system - starting from teacher education programs, recruitment and maintaining a pool of teachers who are committed to the teaching profession. When various components in assessment and evaluation framework are introduced, it should be studied individually and its coherence to the whole framework is determined. Examples, to ensure quality of teaching, countries have required potential taking a licensure examination. A comprehensive approach would require that clear standards had been set in the teacher education programs (initially) such as: the standards of an effective and quality teaching is reflected in its licensure standards; potential teachers who passed the licensure examination for teachers would commit to the teaching profession not only because it is financially rewarding but find themselves in a career which offers career advancement.

2. Finding ways of accurately determining teacher effectiveness or the measures used for teacher evaluation should be a major if not a top priority during the design phase. Are the evaluation criteria reflective of the teaching practice in the GCC region? Who is an effective or outstanding teacher? Are the evaluation tools that have been designed appropriate for the context in which they are measured? Had there been a pilot study to ensure reliability and validity of the evaluation tools? Use of evaluation tools and or/ assessment devices will be fully accepted (resistance minimized or avoided) as part of a
teacher’s performance repertoire if it clearly defines excellent practice; and gives a useful information about the strengths and development areas to improve student learning.

3. A restructuring of the incentive structure of teachers merit the attention of policy makers to attract the best and brightest students to consider a teaching career. Most of the investments made by GCC concentrated on providing infrastructure and introducing state-of the art facilities but it appears that the incentive structure of teachers had not been given full attention.

4. The purposes of evaluation which are summative (to determine if teaching achieved standards for students) and formative (identifying strengths and weaknesses to provide opportunities for professional development) should equally be considered in the overall evaluation system. Often times, evaluation is perceived as a procedure routinely administered before the end of the term as part of the requirement of policy makers, and no deliberate attempt is made to utilize the information as a formative data for the continuous improvement of teaching.

5. Last but not the least, an effective teacher evaluation model requires the active participation, and/or involvement of all stakeholders – from top-down and bottom up of the educational organization.
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## Appendix A:

### TOP PERFORMING NATIONS – Reading Literacy

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**Source:** Organization for Economic Cooperation & Development, Program for International Student Assessment (PISA)
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### TOP PERFORMING NATIONS – Mathematics Literacy

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### OECD Arab Countries’ Performance – Mathematics Literacy

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*Source: Organization for Economic Cooperation & Development, Program for International Student Assessment (PISA)*
Appendix C:

TOP PERFORMING NATIONS – Science Literacy

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OECD Arab Countries’ Performance – Science Literacy

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TOP PERFORMING NATIONS – Science Literacy
### Student Performance in SCIENCE (2015) vs. OECD Average: 493

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### Source: Organization for Economic Cooperation & Development, Program for International Student Assessment (PISA)
Appendix D: Achieving Quality Education Using An Effective Teacher Evaluation System
Appendix E: Opportunities for Career Advancement
Appendix F:

Defining expectations for teachers - Singapore style

- Defined “Competency”
  - Patterns of thinking, feeling, acting, or speaking — that cause a person to be successful in a specific job or role

- Conducted formal research to identify patterns
  - Characterized the differences between the responses of typical and top performers
  - Used primarily for a formative purpose of increasing teacher competence rather than solely for the summative purpose of categorizing teachers

- Results are broad in scope and have strong emphasis on whole child

Steiner, L., Using Competency-Based Evaluation to Drive Teacher Excellence: Lessons from Singapore, Public Impact, NC, 2010