

### Teacher evaluation in Saudi Schools: The potential use of e-portfolio

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Abstract:	<p>Educational enhancement is one of the primary goals being targeted by the Saudi government as clearly exemplified by the Tatweer project. This educational enhancement process is not a single activity; it has many approaches, one of which is the evaluation of the actions and activities being practised across education in Saudi Arabia. Traditionally teachers, as the main role players in providing educational opportunities, are being evaluated by school Principals based on predefined evaluation standards that are set by the Saudi Ministry of Education. This research investigates the current view regarding these standards used in Saudi schools in order to determine if they are suitable for the current needs, especially in the presence of different technological and web solutions. Moreover, this research investigates the readiness of Saudi schools to accept technological solutions for the evaluation of teachers.</p>

1.0 Changing teacher evaluation in Saudi schools

Educational systems are facing change and development in order to accommodate the continuous advances in technology. These advances are shaping educational settings and bringing new and innovative pedagogical theories and practices to Saudi Arabia (Oyaid 2009, Al-Alwani 2005, Alsharari 2010) [1][2][3]. There is common consensus among researchers and policymakers that teachers are the most significant factor in improving student learning. Therefore, high-quality teaching is considered to be the most important school-based factor in increasing student achievement (Darling-Hammond 2000; Rivkin et al. 2005) [4][5]. Teacher quality and the associated practices are assessed and evaluated using different standards and methodologies, but what is lacking is a strategy for organising the evaluation into a coherent system (Kennedy 2008) [6]. Thus it has been found that the challenges lay in measurement, considering what is most important to measure, how to measure it and how to organise it into a comprehensive, multifaceted system. Different educational initiatives and research recommendations are calling for a change in current approaches regarding teacher evaluation. The most common evaluation approach in Saudi Arabia consists of an observation carried out by the school principal or his/her assistant. Having good quality evaluation is a contingency for good professional development (Koppich 2008) [7]. Current evaluation practices have been found lacking alignment with the offered curriculum standards and professional development efforts. This is especially so with the current integration and practice of integrating ICT which does not result in targeted instructional support (Heneman et al. 2006; Jerald 2009) [8][9]. Having these existing issues, along with the growing acknowledgement of the importance of teacher effectiveness in current society, which is knowledge-and technology-based, is spurring calls for reform and accountability in teacher evaluation.

Teacher evaluation has two major purposes: ensuring that teachers are developing students' learning, and improving teachers' own practice through identifying strengths and areas for future professional development. The two approaches refer to different assessment types – summative and formative. The summative judgements are about the outcomes of the results of teachers' actions. The formative aspects result in teachers being guided and supported in developing their professional practice. This paper identifies the acceptance and satisfaction regarding the current traditional (summative) evaluation process from the principals' perspective and identifies the preparedness for enabling the use of electronic environments, including e-portfolios, to support formative evaluation of teachers in Saudi schools.

2.0 E-portfolio Adoption and Evaluation

In the past eight years the Kingdom of Saudi Arabia has concentrated its concern on developing the educational context and settings along with technological and economical advancements. These concerns, regarding developing education, have been guided by His Majesty King Abdullah bin Abdul-Aziz's initiative called

Tatweer. Tatweer Education Holding Company (THC) is a strategic investment company, established in accordance with a Royal Decree from the Custodian of the two Holy Mosques, King Abdullah bin Abdulaziz. The purposes of THC include provision of core and support educational services, development, establishment, acquisition, operation and maintenance of educational projects, and execution of related works and activities. THC is tasked with implementation of the King Abdullah bin Abdulaziz Project for Development of Public Education and any additional educational programmes. It is given the right to invest in and profit from a broad spectrum of core, as well as support, educational services in the Kingdom of Saudi Arabia and abroad (Tatweer 2011) [10]. This initiative focuses on developing educational settings by imposing new standards that guide the interaction of the educational stakeholders. Tatweer's goal is to improve the educational output through improving the inputs, by reducing the numbers of individuals who lack educational competencies required for a teaching career. Tatweer has four major components, which are:

- developing educational standards;
- developing educational tools;
- educational data management;
- educational reporting [11][10](ACER 2011; Tatweer 2011):

The first component is reviewed and developed every five years in order to modify standards in response to the new educational research outputs and developing practices and the other components are reviewed annually. These components represent major educational transformation in Saudi Arabia. The National Centre for Assessment in Higher Education (NCAHE) is working through Tatweer towards establishing benchmarks for teaching quality, identifying training needs for teachers, evaluating outcomes of teacher preparation programmes, supporting educational reform, establishing national indicators in relation to teachers' professional development through continuous development of their professional standards and evaluation tools (Tatweer, 2011) [10].

One of the innovative assessment methods for evaluating teachers' performance in the classroom has been provided through the evaluation of their e-portfolio use. This method is a direct result of the continuous development and integration of ICT in educational settings. E-portfolio assessment is generally performed and supervised by school administrators or school principals. Searching the literature for e-portfolio assessment and adoption in Saudi Arabia schools did not bring any resources that indicate the implementation of such an evaluation strategy. Performing an in-depth investigation of assessment found that all the schools in Saudi Arabia are using a dated form of standard assessment created a long time ago by the Ministry of Education (Al-Thubaiti 1989) [12]. It should be noted that the schools and principals are still required to use this form of evaluation and no other

form is to be officially used and recognized for evaluation of teachers' practises and efforts during the semester or academic year. The assessment form does not include any related evaluation of technology or technological activities and processes in the school, thus it was logical not to find any reference to e-portfolio assessment in Saudi schools. Not having assessment for electronic activities will deprive many teachers of the fair and correct assessment results towards their activities required, in order to promote educational output with the current electronic advancements. Many research studies have outlined the importance of including information and communication technologies in educational curricula, as many students nowadays are spending more time interacting with such technologies rather than using books and printed materials that are considered traditional sources of education. Many schools in Europe and the USA have adopted e-learning and electronic solutions with educational activities and processes, and it was found impossible to promote the level of educational activities to electronic ones without the existence of an effective and advanced ICT infrastructure, therefore Saudi Arabia, has also initiated such plans towards enhancing ICT infrastructure (ACER 2011; Tatweer 2011) [11][10].

Having such preparation towards ICT has been followed by serious consideration towards enhancing educational processes and outputs, thus the Tatweer initiative comes as a natural extension to the advancement of ICT in Saudi Arabia and to the will to reform in education. The literature search related to the Saudi Arabian educational system does not show any results relating to e-portfolio assessment. As such, this research study has focused on surveying two major aspects that are related to traditional assessment processes from the perspectives of school principals. The surveyed aspects are:

- views towards the current teachers' evaluation system and needed reform;
- evaluating schools' administration views towards enabling the use of electronic environments in education

It is believed that the results of these surveyed aspects will contribute towards answering questions that are related to the absence of using e-portfolio assessment methods within the educational context in Saudi Arabia's schools or within the Tatweer initiative.

**3.0 Research design and teacher respondents**

The research study relied on an initial questionnaire that was based on different research studies related to the field of e-portfolio assessment in the general context and the traditional assessment of teachers and principals in Saudi Arabian schools.( Table1, table2). The survey consisted of two main sections: the first asked about the school principals' views towards teachers' current evaluation standards using eight statements with responses given on a five point Likert scale as 5=strongly agree and 1=strongly disagree, while the second section had six statements that

asked about evaluating schools' administration views towards enabling the use of electronic environments in education and they were also based on a Likert scale. In order to check for scale reliability the Statistical Package of Social Sciences (SPSS) was used as it provides such functionalities (Pallant, 2007) [13]. A pilot test was conducted with 4 principals from different schools in Saudi Arabia. The survey pilot results had very good internal consistency, with a Cronbach's alpha coefficient of .81 for the first section of the questionnaire and the Cronbach's alpha coefficient of .83 for the second section and an overall value of .80 for both sections. These values were considered acceptable for using this questionnaire as a tool for investigation with respect to each section and the related questions. The subjects of this study were 11 volunteer Saudi head teachers that were selected using probability sampling, which states that every participant in the sample population has a voluntary and equal chance to be included in the study (Berg 2006; Lucas 2012) [14][15]. The distribution of the survey was performed during the normal lecture sessions, and after excluding incomplete surveys, the final number was 8, yielding a 72 percent return rate. The questions were analysed and the results were presented as shown in the following section.

### 3.1 Questionnaire Results and Statistical Analysis

The computer software SPSS v.15 was used to analyse the data in this study. To test the homogeneity of variance and choose the appropriate analysis tests, Levene's test was conducted in accordance with Pallant (2007: 246) [13]. Also the mean, standard deviation, percentage and T-test values were displayed in order to test the research hypothesis of each section and taking into consideration the following criteria:

- High acceptance degree: includes all the statements that have (Mean > 3.66) and (Percentage > 73.2%)
- Moderate acceptance degree: includes all the statements that have (Mean between 3.66 and 2.34) and (Percentage between 73.2% and 46.8%)
- Low acceptance degree: includes all the statements that have (Mean < 2.34) and (Percentage < 46.8%)

	Statement	M	SD	%	Value
1	The current assessment is not covering all the performed processes and activities by teachers during the semester	4.7	0.5	95	High
2	A better monitoring system for teachers activities should be made for the purpose of evaluation	4.7	0.5	95	High
3	Teachers electronic activities are not coming along with the current assessment system	4.7	0.5	95	High
4	If e-portfolios are going to be considered in the evaluation processes, there should be a reform of the current assessment system to include the new processes and activities	4.4	0.7	88	High
5	If traditional portfolios are going to be considered in the evaluation processes, there should be a reform of the current assessment system to include the new processes and activities	4.1	1.1	83	High
6	I support the need for general reform towards enhancing the current evaluation system of teachers	3.9	0.6	78	High
7	Part of the evaluation system should involve students opinions	3.3	0.9	65	Mod.
8	Part of the evaluation system should involves students added	2.4	1.2	48	Mod.

	value				
9	Part of the evaluation system should involve peer review	2.3	0.5	45	Low
	<b>Total</b>	3.8	0.2	77	

Table 1: Principal’s View Regarding Teachers’ regarding Teacher Evaluation

In the first section of the questionnaire (Table 1) the mean total of the eight statements was (3.83) and standard deviation (0.245) with a percent of 76.7%. The first sections’ mean ranged from (4.75) to (2.25) while the standard deviation scores’ range were (SD = 0.245 and SD = 1.26). The second sections’ mean total of six statements was (3.79) with a standard deviation value of (0.248) with a percent of 75.8%. The mean values of section two ranged from (4.88) to (2) with a standard deviation value ranging from (0.248) to (0.756). According to [13] Pallant (2007: 84-86) [13], the total mean in the questionnaire statement responses is calculated in order to establish the general picture as well as to gain more understanding of the participants’ responses.

It is noticed that the acceptance degrees are generally high for all the statements excluding statement (8, 9) that gain the lowest acceptance degree with a mean of (2.25) for the statement - *Part of the current evaluation system should involves peer review* - and a mean of (2.38) for the statement - *Part of the current evaluation system should involves students added value-*. The rest of the statements are fairly high, which shows that the principals’ views towards the questions (1 to 7) are positive confirmative with high acceptance.

	Statement	M	SD	%	Value
1	The school supports the idea of using blended e-learning resources as it is considered important in educating Saudi students in this digital era	4.9	0.4	98	High
2	The school is currently or in the near future willing to provides electronic environment suitable for enabling the sharing processes of electronic learning objects between students and teachers	4.3	0.7	85	High
3	My school is encouraging the use of electronic resources in teaching	4.1	0.6	83	High
4	My school has already or willing to establish an electronic channels for communicating with teachers	4.0	0.5	80	High
5	My school has already or willing to establish an electronic channels for communication between students and teachers	3.5	0.8	70	Mod.
6	School policies agrees with using external electronic systems for the purpose of education such as (blogs, forums, learning management systems, e-portfolios) under the supervision of schools administration	2.0	0.5	40	Low
	<b>Total</b>	3.8	0.2	76	

Table 2: School administration’s views regarding electronic environments in education

According to the values in Table 2, it is noticed that the acceptance degrees are generally high for all the statements excluding statement (6) that gain the lowest

acceptance degree with a mean of (2) for the statement of (School policies agrees with using external electronic systems for the purpose of education such as (blogs, forums, learning management systems, e-portfolios) under the supervision of schools administration). A moderate mean of (3.5) for statement of "My school has already or willing to establish an electronic channels for communication between students and teachers". The rest of the statements are fairly high, which shows that the principals' views are positive confirmation with high acceptance.

The T-independent test was used to verify the proposals. The first hypothesis, which relates to section 1 of the survey questionnaire, is: "Principals have a negative view regarding teachers' reform needs towards the current evaluation system".

To find the result an alpha level of 0.05 was established before testing the significance. As recommended by Pallant (2007) [13], the Levene's Test for Equality of Variances was checked. If the Levene's Test is significant ( $p < .05$ ), the two variances are significantly different. If it is not significant ( $p > .05$ ), the two variances are approximately equal. Here, since the Levene's test is significant ( $p < .05$ ) and the calculated T (9.625) is larger than the tabulated T (3.000), it can be assumed that the variances are not equal. Therefore, the assumption of equal variance has not been met. This means that principals are actually supporting the necessity for reforming the current evaluation approach towards teachers' activities.

The second hypothesis relates to section 2 of the questionnaire is, "Principals have a negative view towards enabling the use of electronic environments in education".

Again an alpha level of 0.05 was established before testing the significance. Levene's Test for Equality of variances was checked, since the Levene's test is significant ( $p < .05$ ) and the calculated T (9.029) is larger than the tabulated T (3.000), it can be assumed that the variances are not equal. Therefore, the assumption of equal variance has not been met. This means that principals are actually supporting the necessity for enabling the use of electronic environments in education.

#### 4.0 Discussion of the findings

The results derived from analysing the questionnaires show that there is a positive view and support from principals towards reforming the current evaluation system used in Saudi Arabian schools. The majority, 95 percent of principals, have agreed that the current assessment tool is not covering all the performed processes during the semester which is calling for a better monitoring system and evaluation criteria that needs to include electronic activities too. On using portfolios, either in the traditional approach or enabling the use of e-portfolios, there is majority agreement that the current evaluation system is not capable of including such activities, and there should be a general reform towards the current evaluation system in use. In



terms of including students' opinions and their added values within the evaluation process of teachers, the results came as moderate, which shows that the principals are not currently depending on students' views to evaluate teachers, although many studies identify students as a major evaluation input in the evaluation process (Braun 2005) [16]. Moreover, the low 45 percent of principals agreed on including teachers' peer review in the future evaluation process, which shows that principals are currently the only source of assessment of teachers' activities in Saudi Arabian schools.

In terms of enabling the use of electronic environments in Saudi Arabia's schools to be part of the educational processes, the high percent of 97.6 shows that the majority of schools are in support of considering e-learning resources and processes in this digital era. Moreover, the majority of schools have shown that they are in favour and support providing an electronic environment that will be used for enabling the shared processes of learning objects and electronic communication in the school. Moreover, they showed that they currently support and encourage the use of electronic resources provided by teachers for use with students' learning. However, in terms of using external electronic systems for the purpose of education most of the participating schools have shown a low agreement on the use of such systems. The low percent of 40 can be explained as most of the schools are attached to the Ministry of Education and any use of external resources should be reported and agreed upon by the Ministry of Education and within their direct supervision. Moreover, many principals also emphasise the conservative nature of Saudi society and the segregation policies between males and females in Saudi schools. They agreed that having such external systems without direct supervision from the Ministry would create some challenges towards the ethical use and distribution of users' data which explains the low agreement on using external educational systems.

5.0 Conclusions drawn from the study

The Kingdom of Saudi Arabia is facing a general reform of education and this is clearly represented by the Tatweer project. Different aspects have been assessed by the Tatweer project, but no clear results have been presented regarding the traditional evaluation methods and their acceptance among principals in Saudi schools. Schools in Saudi Arabia are still using the traditional forms of teacher evaluation that is provided by the Ministry of Education, and no change has been made on that evaluation form in order to include the other electronic activities that are currently adopted by many teachers. The results that have been derived from this study have shown that principals are aware of the need to change and adopt a new method of evaluation by including different factors to be measured and recorded in order to be more accurate towards evaluating teachers' efforts during their teaching and managerial activities. Moreover, principals have also agreed on the need for reforming the current evaluation in order to include activities that are specifically targeted towards the use of portfolios and e-portfolios, as this method of evaluation is widely recognised and used in many western and European schools. In terms of including and enabling the use of electronic environments in



education, most of the participating principals have shown a positive attitude towards this technological advancement and its application in the field of education. Moreover, the majority of principals agreed that they have or willing to include electronic environments within their schools, which shows that there is a positive attitude towards electronic initiatives in the field of education. Such a positive attitude is surely supported by the positive orientation of the Ministry of Education towards all the schools are supervised and guided by the Ministry. The current research has shown the administrative view on the current evaluation standards and the use of technology in Saudi schools, and this research will be extended in the future to show the teachers' view on their current evaluation methods and the integration of technology.

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