

Teachers' Workload Capacity in the Implementation of Standard-based Assessment System in Malaysian Primary Schools

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Abstract

In 2011, the Ministry of Education, Malaysia implemented the Standard Based assessment system for all Malaysian public schools. This assessment system which focuses on upgrading the formative assessment system consequently raised several issues including teacher workload. Therefore, the main aim of this study was to explore teachers' workload capacity in the implementation of the standard-based assessment in the primary school Mathematics classrooms. The study employed a descriptive research design which integrated survey questionnaires and interviews. It involved a total of 290 teachers from national primary schools from the state of Selangor in Malaysia. The findings of the study showed that teachers were facing some key workload issues such as their beliefs of formative assessments, teaching and learning, motivating students, support group and professional development capacities. All these issues of concern have to a certain extent hindered the effective implementation of authentic assessment initiatives. Henceforth, it is pertinent that the right mechanisms be put in place to help identify and overcome these shortcomings in a bid to further enhance the teaching, learning and assessment practices in the primary classroom.

Keywords: Standard-Based Assessment; Performance Standard; Formative Assessment; Summative Assessment

Introduction

The traditional norm-based system which focuses on high stakes examinations has been heavily criticized as having detrimental effects on student learning and should be reduced to minimum (Harlen & Crick 2003; Morrison & Tang 2002; Black 1998). Hence, in 2011, the standard-based assessment system was introduced in Malaysian public schools to replace the norm-based assessment system. The current standard-based assessment system which was initiated by the Ministry of Education is supported with the Primary School Standrad Curriculum or *Kurikulum Standard Sekolah Rendah* (KSSR) and Performance Standard (PS) starting from Year 1 to Year 6 (Office of Director General, 2010; Examinations Syndicate (2011). The aim of this current standard based education system is to improve the learning process rather than the results of the assessment (Kirton, Hallam, Peffers, Robertson, & Stobart, 2007; Stiggins, 2005; Stobart,



2008). The standard-based education system reflects a convergence of policy trends, the importance on using formative authentic assessments and the belief that effective education transformations work in alignment toward a common set of goals. The integration of teaching, learning and assessment standards which promote effective formative assessment approaches in the classroom is depicted in Figure 1 below.

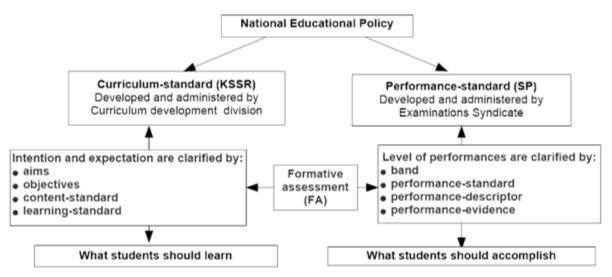


Figure 1: Standard-based Assessment Approach in Malaysian Schools

Figure 1 shows that curriculum and assessment standards will provide a coherent framework for the enhancement of learning and assessment in Malaysian schools. Although there are undeniably advantages related to this standard-based system, the implementation could still pose a number of workload capacity issues to many parties in schools. Hence, this paper aims to investigate the teachers' perspectives on workload capacity as a result of the implementation of the standard-based assessment.

In fact, the notions of what constitutes effective standard-based school system have progressed over time (Massell, 2008). Despite research on the reformation of school system has been changed from norm-based to standard-based, there are implementation concerns that need to be addressed. The controversies and disputes that arose from the issues of the implementation of standard-based system have been critically discussed among many educators and stakeholders. One of the key impediments of standard-based system are the workload capacity that teachers faced in the implementation of the current standard-based school system. There are legitimate questions about the issues relating to the workload capacity of the system from teachers' perspective. As teachers play an active role in ensuring the effectiveness of standard-based system, therefore it is important to address this issue from teachers' perspective in order to improve education system in Malaysian schools.



Literature Review

In Malaysia, the assessment system in pre-schools, primary and secondary schools was recently re-structured under the National Educational Assessment System (NEAS). The Examinations Syndicate is the sole agency given the authority by the Educational Act 1996 to strategise the execution of educational assessment in the Malaysian education assessment system through central examinations and school-based assessment (SBA, hereafter). Centralised public examination certificates are awarded to students who sit for the examinations at certain levels of schooling such as the Year Six Ujian Penilaian Sekolah Rendah (UPSR) for the primary schools, and the Form Five Sijil Pelajaran Malaysia (SPM) for the higher secondary level (Examinations Syndicate, 2011). Besides the centralised public examinations and the school final year summative examinations, the SBA report is presented to the students at the end of every schooling year by the respective schools. There is no denying that SBA assesses a broader range of holistic development of a student in different aspects of psychomotor, cognitive and affective, when compared to the central examination which assesses only the cognitive domain.

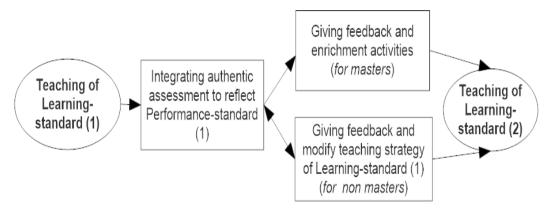


Figure 2: The integration of performance assessment in teaching-learning process

Figure 2 shows an example of the integration of performance assessment of standard-based system in the cycle of a unit of teaching and learning practice in a classroom setting featuring an element of feedback after an assessment is conducted. Figure 2 shows that after a teacher has taught for example, learning standard (1), he/she will continue the process of teaching-learning by integrating assessment related to Performance standard (1). A single performance standard operates for a particular student at a particular stage of development. The quality of performance of a student is expected to rise steadily as the student progresses through various performance standards (Examination Syndicate, 2012). The more able students who manage to present evidence on Performance standard (1) will be given motivational feedback and enrichment activities to advance to the next tier of learning, i.e. learning standard (2). In fact, feedback obtained have indicated the existence of a 'gap' between mastery learning and nonmastery learning (Taras, 2005). Hence, the standard-based system will benefit students and teachers alike. In this new system, teachers use feedback to strategise their teaching-learning, while students use feedback to monitor the strengths and weaknesses of their performance, so that aspects associated with success and quality of learning can be recognised and reinforced



and unsatisfactory aspects can be modified or improved (Sadler, 1989; Clark, 2011). Obviously, implementation is the fundamental step to transform a system. According to Fullan (2007), implementation consists of putting ideas into practice and structures. Fullan (2007, p. 30) added that there are at least three important components to be dealt with while implementing a new policy: (1) the alteration of beliefs, (2) the use of new materials and (3) the use of new approaches. In Malaysia, with that notion, the implementation of performance standards in schools also requires (1) the change of teachers' beliefs in the current assessment practice (2) the knowledge of performance assessment, and (3) the new approaches to classroom assessment.

In order to set up an effective implementation of this performance standard (PS, hereafter), the Ministry of Education needs competent teachers who have the knowledge, skills, beliefs to develop their professional selves. These attributes are the qualities that most teachers should have as pre-requisites to implement the new educational system. This PS needs to inspire teachers to garner ownership, commitment and clarity about the nature of the transformation because the execution of PS can only be achieved if teachers as change agents can behave strategically (Fullan, 2007) in the classroom. However, Fullan (2007, p. 31) also warrants that,

"It is very difficult to define once and for all exactly what the objective dimensions of change are with respect to materials, teaching approach and beliefs, because they may get transformed, further developed, or otherwise altered during the implementation."

The reason behind the implementation of a new education policy is usually due to the demands of complex global society and educated citizens for improvement (Fullan, 2007). Fullan (2007) believes how an implementation is put into practice will determine its success.

"It requires intensive action sustained over several years to make possible both physically and attitudinally for teachers to work naturally together in joint planning; observation of one another's practice; and seeking, testing and revising teaching strategies on a continuous basis." (Fullan, 2007, p. 7).

Based on that note, the challenge for the teachers to be effective lifelong learners whose ultimate goal is visualised by Novak (2010, p. 23) who stated that "meaningful learning underlies the constructive integration of thinking, feeling and acting leading to empowerment for commitment and responsibility." However, teachers' unfamiliarity with PS might post risks of incompatibility. Consequently, teachers adopt the implementation on the surface, whereby the forms and structures of the processes are altered but not the practice of teaching (Fullan, 2007). Since many teachers are still not proficient in classroom assessment skills (Boon, 1991), it has led to assessment information that has not been fully utilised.

In response to the implementation of performance standard in primary schools in Malaysia, the teaching and assessment philosophy and practices have been aligned with the learning



standard. In order to ensure success, teachers need to collaborate and participate in the improvement of their classroom practice. In that, teachers should base their actions on the way they believe things to be or based on their perceptions. Since the objective of implementing PS is to change the educational practice and produce quality students, hence the execution of PS requires vigilance assessment and measurement. Proper measures need to track not just the inputs of teachers' competencies and beliefs but also the changes that occur during the implementation and the output of students' quality. Therefore, in order for significant assessment change to occur in schools, the PS needs to be created and implemented by teachers themselves. Therefore, this current study intends to explore teachers' workload capacity while implementing the standard-based assessment system in Malaysian primary schools.

Methodology

As mentioned above, the main aim of the study was to investigate teachers' perspectives on workload capacity as a result of the implementation of the standard-based assessment. A descriptive-correlation research design was used to corroborate findings within this study. Significantly, the more the measures corresponded with each other, the more the researcher would be confident about the findings (Cohen, Manion & Morrison, 2007). The study employed multiple instruments namely survey questionnaire and interviews protocol to help balance the limitations of each data collection method (Gray, 2004; Dudley, 2005).

The study was set in primary schools in the state of Selangor located in Peninsular Malaysia. The state of Selangor was randomly selected from the 15 states in Malaysia. Generally, Selangor is similar to all other states in Malaysia as the respondents in Selangor were using the same curriculum, textbooks and directions from the Ministry of Education, Malaysia. The researchers stratified the sample to reproduce population characteristics as noted by Bryne (2002, p. 73) *"if we want a sample that looks like population, we must stratify the sample."*

Stratified random sampling technique was used to choose respondents to be involved in this study. Finally, a total of 290 teachers in which 237 of them were females and 53 were males were selected for the study. Among the chosen respondents, 189 were from urban schools, while the remaining 101 were from rural schools.

A self-assessment survey instrument referred to as the Teachers' Classroom Assessment Practice Survey (TCAPS) was used in this study. The researchers used the self-assessment approach in the survey as suggested by Saville (2008, p. 270) because "self-assessment can be described as the process undertaken by individuals or organizations to study the discrepancies that exist between what they say they do or want to do and what they actually do or what actually happens".



Research Finding

Undeniably, the implementation of a new policy which introduced standard-based assessment system in all public schools in Malaysia brought about a process of transformation in many aspects including workload capacity among teachers in their routine activities. Henceforth, this section presents the main findings of the study with regards to the teachers' perspectives on the workload capacity as a result of the implementation of PS under the standard-based assessment system at their respective schools.

The results presented in Table 1 below show the dimensions of the workload capacity faced by teachers in the implementation of this new system.

Dimensions of Workload Capacity	Ν	Mean	SE	SD
Belief factor	289	3.87	.042	.718
Teaching-learning factor	290	3.37	.042	.723
Motivating students factor	290	3.06	.047	.798
Support group factor	290	2.92	.044	.744
Professional development factor	290	2.74	.051	.876

Indicators: 1=Strongly disagree; 2=Disagree; 3=Undecided; 4=Agree; 5=Strongly agree

From the findings obtained from the questionnaire, it was identified that teachers face distinct workload capacity in their work including belief factor, teaching-learning factor and motivating students' factor. Table 1 presented teachers' workload capacity according to the descending order of the mean scores. Overall, teachers in this study almost agreed that the belief factor (M=3.87, SD=.718) was the number one challenge in their practice. Teachers were moderately undecided if the teaching-learning dimension (M=3.37, SD=.723) saw an increase in their workload capacity. The results further indicated that the motivating students factor (M=3.06, SD=.798) was rated within their control as they were undecided if this dimension witnessed an increase in their workload. However, the support group (M=2.92, SD=.744) and professional development dimensions (M=2.74, SD=.876) were not really viewed as factors that increased their workload. The detailed results of items in these dimensions were presented in the following paragraphs. Overall, teachers in the study perceived that they were undecided and disagreed on determining their practice in implementing performance-standard as workload.

Belief Factor

The first item in Table 2 indicates that teachers moderately agreed that the highest increase in workload capacity is having to conduct performance assessment related to data entry (M=4.48, SD=.83). They believed that their work was often stalled due to poor internet connectivity and periodic system maintenance in schools.



Table 2. Teachers' Belief in Workload Capacity

Teachers' Belief in Workload Capacity	N	М	SE	SD
Data entry work pending due to poor internet	289	4.48	.049	.83
connectivity and periodic system maintenance				
Teacher is not convinced on the effectiveness of	288	3.58	.062	1.05
observation method				
Formative assessment cannot challenge the effectiveness	289	3.55	.059	1.01
of summative assessment				

Indicators: 1=Strongly disagree; 2=Disagree; 3=Undecided; 4=Agree; 5=Strongly agree

This finding was further corroborated during the interview sessions. Teachers who were asked during the interview further stressed that due to poor internet connectivity they often had to wait for hours before they could proceed with data entry. Besides that the periodic system maintenance on School-based Assessment Management System (SPPBS) website was another thorny issue. All these not only impeded their work but also slowed down the data entry process and consequently the printing and preparation of reports. Some teachers also pointed out that due to poor connectivity they often had to redo the data entry many times and this encroached into their personal time.

The second item in Table 2 indicated that teachers in the study were not convinced in the use of observation as an assessment tool as they were moderately undecided on the effectiveness of the observation method (M=3.58, SD=1.05) in the PS. In fact, the stress related to workload capacity in classroom assessment faced by most teachers was often associated with flexible approaches in the new practices of observation method which caused many uncertainties in the scoring. Interview sessions further showed that a majority of teachers were not comfortable in conducting observations as it was time consuming. On the other hand, a few other teachers highlighted that they were not well equipped and trained to use observations as an assessment tool because of the subjectivity involved.

The third item in the belief factor dimension indicated that the traditional way of teaching was preferred by most teachers as the effectiveness of Summative Assessment (SA) over formative assessment (FA) has dominated teachers' beliefs (M=3.55, SD=1.01). They were moderately undecided whether FA was able to challenge the effectiveness of SA. This again was highlighted during the interviews. A few teachers had qualms as to the effectiveness of evaluating their pupils using formative assessment tools as they felt summative assessment was 'more accurate, fair and objective.'

Nevertheless most of the teachers interviewed agreed that the introduction of standard-based education and assessment has helped them to see teaching and learning in a new light. They agreed that they saw the potential benefits but many were a little apprehensive in experimenting the new teaching, learning and assessment approaches. A majority of the



teachers interviewed also agreed that having to experience the paradigm shift in teaching, learning and assessment was not only a source of stress but also a challenge as they had so many questions that were left unanswered since everyone in school was trying their best to grapple with the shift to standard- based assessment.

Teaching-learning Factor

Looking at the teaching-learning factor (Table 3), a majority of the teachers' responses were rather neutral. Teachers almost agreed on "Teacher does not have enough time for planning the execution of many formative assessments", (M=3.77, SD=.91) and "syllabus is incomplete with the integration of assessment into teaching and learning", (M=3.74, SD=.95). The results also indicated that teachers were undecided on the fact that FA failed to change the traditional culture towards integrated learning (M=3.46, SD=.97). Teachers were also undecided on the fact that they had difficulty referencing on the correct technique for conducting performance assessment (M=3.46, SD=1.05). This indecisiveness was also articulated with regards to whether performance standards improved their students' performance (M=3.34, SD=1.01) or contributed to teachers' performance evaluation (M=3.34, SD=1.06). Besides that, teachers' were also undecided as to whether the task of integrating performance assessment into the teaching-learning process (M=3.24, SD=1.04) was a challenge, and whether the integration had interfered their teaching (M=3.22, SD=.97). They however reluctantly agreed that understanding the implication of integrating performance standards was a challenge (M=3.14, SD=1.06) and class control was a problem to them (M=3.02, SD=1.19).

Table 3. Teachers' Workload Capacity in Teaching-Learning

Workload Capacity in Teaching-Learning	Ν	Μ	SE	SD
Teacher does not have enough time for planning	289	3.77	.053	.91
the formative assessments				
Syllabus is incomplete with the integration of assessment	289	3.74	.056	.95
into teaching-learning				
Formative assessment fails to change classroom culture	287	3.46	.057	.97
into integrated learning				
Teachers have difficulty referencing on technique of	289	3.46	.062	1.05
performance assessment				
Performance-standard does not improve students' performance	289	3.34	.060	1.01
Teachers' innovativeness in classroom assessment	287	3.34	.062	1.06
does not contribute to their performance evaluation				
It is difficult to integrate performance assessment into	287	3.24	.062	1.04
the teaching-learning				
The integration of assessment into teaching interferes	287	3.22	.057	.97
with instruction				
Teachers are not clear with the implication of	290	3.14	.062	1.06
performance standard				



Class control loosens when teacher conducts 289 formative assessment

9 3.02 .070 1.19

Indicators: 1=Strongly disagree; 2=Disagree; 3=Undecided; 4=Agree; 5=Strongly agree Interview sessions further revealed that many teachers were struggling in adapting to the new policy. A common challenge mentioned in the interview was on the integration of performancestandard into the teaching-learning process and having to complete the syllabus within the school-term. When asked to give their views on the limitations of the new policy and its implementation, most teachers felt it was a "very complicated practice to be adopted" and understood.

One of the common workload capacity increase highlighted during the interviews was having to spend extra time communicating and educating parents on how to comprehend their children's accomplishment based on formative assessment reports submitted to parents. Another workload relating to teaching-learning factor was the fact that teachers need to be more selective in teaching with the integration of performance assessment into teaching-learning.

From the interview findings, it is clear that much of the information needed to make effective teaching decisions emerged in the context of assessment practice. The interview findings also revealed that the vast majority of teachers agreed that they did not have enough time for planning the teaching and learning factor in the PS. Consequently, some teachers advocated teaching strategies to be better scripted and routinised. The purpose was to reduce variability in the implementation and to produce outcomes from a significant subset of teachers.

Motivating Students' Factor

Motivating students to learn is a central part of teachers' practice in the classroom. In general, the result of this study displayed in Table 4 showed that teachers were undecided whether students took their teachers' feedback seriously or not (M=3.45, SD=1.00). However, teachers also slightly disagreed that FA does not help students' understanding (M=2.95, SD=1.03) and hence their students are passive in the classroom (M=2.81, SD=.99).

Table 4. Teachers' Workload Capacity in Motivating Students

Ν	М	SE	SD
287	3.45	.059	1.00
287	2.95	.061	1.03
290	2.81	.058	.99
	287 287	N M 287 3.45 287 2.95 290 2.81	287 3.45 .059 287 2.95 .061

Indicators: 1=Strongly disagree; 2=Disagree; 3=Undecided; 4=Agree; 5=Strongly agree

There are direct and indirect impacts of the new policy to students' learning as narrated by the teachers on student performance in the interview. Students were perceived as being playful and less motivated by their teachers. On one other hand, some teachers were sceptical when concerning the manifestation of a student under the transformed policy.



Support Group Factor

Support group is very important as it assists teachers' professional development. The support can be gained from external and internal school channels. Teachers were undecided on naming workload capacity associated with external parties. Many teachers have no idea whether the workshops organised by the Malaysian Examination Syndicate were comprehensive or not (M=3.56, SD=.95) but they disagreed that they have difficulties in consulting with the mentors of FA (M=3.02, SD=1.04). Overall, teachers moderately disagreed that workload capacity to internal support on two factors namely teachers' learning community does not exist in schools (M=2.68, SD=.97) and teachers share limited knowledge on performance standard in schools (M=2.42, SD=.99).

Table 5. Teachers' Workload Capacity in Support Group Factor

Workload Capacity in Support Group	n	Μ	SE SD
Workshop organised by the Examinations Syndicate	289	3.56	.056 .95
is not comprehensive			
Teachers have difficulties consulting the mentors	289	3.02	.061 1.04
of formative assessment			
Teachers' learning community does not exist in school	289	2.68	.057 .97
Teachers share limited knowledge on performance	290	2.42	.058 .99
standard in school			

Indicators: 1=Strongly disagree; 2=Disagree; 3=Undecided; 4=Agree; 5=Strongly agree

To date, the Ministry of Education, especially the Examination Syndicate has organised many courses nationwide in order to prepare teachers with the implementation of school-based assessment. The cross-tabulation on the distribution of teachers as respondents attending the courses and the significance of their selection as the course participants between demographic variables is depicted in Table 6. The majority of the teachers who attended the workshops organised by the Examination Syndicate were female teachers (52.6%). Generally, these teachers possessed advanced teaching qualification (39.4%), they teach heterogeneous ability students in a class (54.5%), and have teaching experience of 10 years (35.5%). Most of these teachers were below the age of 40 (49.0%) and were from urban schools (43.0%). A majority of them were teaching Year 1 Mathematics (24.4%) and attending 40 students and less in a class (47.1%).



Table 6. Teachers' Attendance in Courses

		Percentage at	tending		
Demographi	c variables	Yes	No	Total	Chi-Square
					Sig.
Gender	Male	12.7(37)	5.8(17)	18.6(54)	.581
Genuer	Female	52.6(153)	28.9(84)	81.4(236)	
Qualification	Basic	25.8(74)	16.4(47)	42.0(120)	.225
Qualification	Advanced	39.4(113)	18.5(53)	58.0(166)	
Students'	Mix ability	54.5(158)	29.3(85)	83.8(243)	.686
Ability	Similar ability	11.0(32)	5.3(15)	16.2(47)	
Experience	10 years and below	30.0(87)	16.2(47)	46.2(134)	.844
	Above 10 years	35.5(103)	18.3(53)	53.8(156)	
Students'	Year 1	24.4(71)	12.7(37)	37.1(108)	950
	Year 2	19.6(57)	9.6(28)	29.2(85)	.859
Taught	Year 3	21.3(62)	12.4(36)	33.7(98)	
Classroom	40 students and	47.1(137)	25.1(73)	72.2(210)	.975
Size	less		25.1(75)	72.2(210)	.975
3120	Above 40 students	18.2(53)	9.6(28)	27.8(81)	
٨٩٥	Below 40 years old	49.0(142)	26.9(78)	75.9(220)	.691
Age	40 years and above	16.2(47)	7.9(23)	24.1(70)	.031
	Urban	43.0(125)	22.0(64)	65.2(189)	
Location	Rural	22.3(65)	12.7(34.8(101)	.680
	Nuidi		37)	34.0(101)	

Note: Number in parentheses is frequency of teachers in each group.

The data in Table 7 showed that teachers with above 10 years of experience were less interested to attend courses (20.4%) as compared to teachers with below 10 years of experience (11.4%). These teachers were teaching 40 students or less in a class (47.9%) and below 40 years old (53.8%). Urban teachers were more keen to attend the courses (45.9%) compared to rural teachers (22.4%).

Furthermore, the Chi square test (p>.05) result shown in Table 6 indicated that there were no significant differences on the selection of teachers attending courses between and among groups in various demographic variables: gender (p>.05), academic qualification (p>.05), class taught (p>.05), classroom size (p>.05), age (p>.05) and location (p>.05).

There were also no significant differences on preference for courses based on gender, academic qualification, class taught, classroom size, age and location as indicated by p>.05 in Table 7. However, there was only a significant difference on respondents' preference for courses based on teaching experience (p<0.05).



Table 7. Teachers' Interest for Courses

		Percentage Interested				
Demographi	Demographic variables		No	Total	Chi-Square	
					Sig.	
Gender	Male	13.4(39)	5.2(15)	18.6(54)	.490	
	Female	54.8(159)	26.6(77)	81.4(236)		
Qualification	Basic	26.6(76)	15.4(44)	42.0(120)	.108	
Quanneation	Advanced	42.0(120)	16.1(46)	58.0(166)		
Students'	Mix ability	59.2(171)	24.9(72)	84.1(243)	.118	
Ability	Similar ability	9.3(27)	6.6(19)	15.9(46)		
F	10 years and below	34.9(101)	11.4(33)	46.4(134)	.014	
Experience	Above 10 years	33.2(96)	20.4(59)	53.6(155)		
Cturdouto/	Year 1	26.2(76)	11.0(32)	37.2(108)	.820*	
Students' Taught	Year 2	19.7(57)	9.3(27)	29.0(84)	.820*	
Taught	Year 3	22.4(65)	11.4(33)	33.8(98)		
Classroom	40 students and less	47.9(139)	24.1(70)	72.1(209)	.299	
size	Above 40 students	20.3(59)	7.6(22)	27.9(81)		
Δ.σ.ο	Below 40 years old	53.8(156)	22.1(64)	75.9(220)	.088	
Age	40 years and above	14.5(42)	9.7(28)	24.1(70)	.000	
Location	Urban	45.9(133)	19.3(56)	65.2(189)	.294	
Location	Rural	22.4(65)	12.4(36)	34.8(101)	.294	

df=1, *df* = 2*

Note: Number in parentheses is frequency of teachers in each group.

Professional Development Factor

Regarding workload capacity in professional development, findings presented in Table 8 indicated that teachers slightly disagreed that they have no effective model to showcase or compile students' portfolio (M=2.94, SD=1.11), and the in-house training (M=2.93, SD=1.04) was incomprehensive, and the FA skill (M=2.81, SD=1.08) of teachers was also inadequate. They also disagreed that they did not understand the difference between FA and SA (M=2.62, SD=1.09) and were not well versed in operating the application of School-based Assessment Management System (SPPBS) (M=2.60, SD=1.17).

The study also found that attending professional development to enhance classroom assessment skills meant an increase in teacher workload. Hence a majority of teachers were solely dependent on the school administration to arrange for professional development courses and this majority also felt that they did not need professional development courses.



Table 8. Teachers' Workload Capacity in Professional Development

Workload Capacity in Professional Development	n	М	SE SD
Teachers do not have a model on compiling students' portfolio	289	2.94	.065 1.11
In-house training conducted by the school is not comprehensive	290	2.93	.061 1.04
Teacher lacks formative assessment skill	289	2.81	.064 1.08
Teachers do not understand the difference between formative	289	2.62	.064 1.09
and summative assessments			
Teachers are not well versed in operating computer and	290	2.60	.069 1.17
SPPBS application			

Indicators: 1=Strongly disagree; 2=Disagree; 3=Undecided; 4=Agree; 5=Strongly agree

The t-test result in Table 9 revealed that there were no significant differences between and among groups based on various demographic variables such as gender (t=1.312, p>.05), academic qualification (t=-.436, p>.05), experience (t=1.037, p>.05), age (t=1.286, p>.05) and location (t=.1.215, p>.05).

Demographic	variables	N	Μ	SD	SE	Df	Т	SE	Sig. tailed)	(2-
	Male	53	3.29	.60	.08	288	1.312	00	.191	
Gender	Female	237	3.17	.58	.04	288	1.312	.09	.191	
Qualification	Basic	121	3.18	.61	.06	204	436	07	.663	
	Advanced	165	3.21	.57	.04	284		.07		
Experience	≤ 10 years	133	3.22	.52	.05	707	1.037	07	.301	
Experience	> 10 years	156	3.15	.64	.05	287		.07		
A	<40 years old	219	3.21	.57	.04	207	1.286	00	.222	
Age	≥40 years old	70	3.11	.64	.08	287	1.280	.08		
Location	Urban	189	3.22	.59	.04	200	1 21 5	.07 .	220	
	Rural	101	3.13	.59	.06	288	1.215		.226	

Table 9. Teachers' Perceived Workload Capacity

Indicators: 1=Strongly disagree; 2=Disagree; 3=Undecided; 4=Agree; 5=Strongly agree

The result reported in the study indicated that there were workload capacities in conducting classroom assessments among teachers. However, the survey findings revealed that teachers with different demographic variable were approximately undecided to define the problems they faced as workload capacity. In general, their rating was inclined to slightly disagree on the matter. This was illustrated in Table 9. The mean score index indicated that male teachers (M=3.29, SD=.60) were struggling more than female teachers (M=3.17, SD=.58) in this matter. There were slight differences in the mean scores of teacher performance identified between different qualification categories. Teachers with advanced qualification (M=3.21, SD=.57) were more undecided than teachers with basic qualification (M=3.18, SD=.61). A similar pattern was



also identified by those serving lesser years in schools. In short, junior teachers (M=3.22, SD=.52) were more undecided than senior teachers (M=3.15, SD=.64). In fact, age also played a role as older teachers showed a firmer score to disagreement (M=3.11, SD=.64) than younger teachers' slight indecision (M=3.21, SD=.57). The mean scores were comparable between groups and was seen between teachers teaching in the rural area (M=3.13, SD=.59) compared to those teaching in the urban area (M=3.22, SD=.59).

Discussion

The findings of the study showed that teachers with different demographic variables were undecided on how to define the problems they faced while implementing standard-based performance assessment as workload capacity. Among the dimensions of workload capacity discussed in this study were belief, teaching and learning, motivating students, support group and professional development factor.

Belief Factor

The teachers involved in the study should be more sensitive to the changing needs of the policy. Most of them were complacent and satisfied with their past knowledge but they fail to acknowledge that some were obsolete due to the changing nature of society and technology. Additionally, to be effective in the implementation process, teachers need to alter their beliefs on the use new material and experimenting new approaches as echoed by Fullan (2007). Some teachers involved in this study believed that new practice to be menacing, imminent and troublesome, while others approached it with a fighting spirit, favouring adjustment and adaptation. On one hand, believing stressful situations as harmful hinders teachers' ability to analyse and subsequently cope with these situations. Seeing them as challenging enables them to deal effectively with the events.

Teachers in the study need to slowly separate manual recording from the past and accept new technology such as School-based Assessment Management System (SPPBS), as an integral part of students' data management system in the 21st century. Adding to the workload capacity of integrating students' data management system were the problems of filing room and internet connection that fail to function. Unfortunately, what remains in the minds of many teachers in the study was that technology issues were not being addressed well in schools. Acknowledging the workload capacity, many teachers have a strong belief that this system will follow other policy changes that failed in the implementation process. The findings in this study indicated that inadequacy of knowledge plays a vital role in teachers' belief system.

Implementing performance assessment requires a change in teachers' thinking about assessment. As teachers integrate it in the teaching-learning process, there are mixed methods and strategies that teachers can adapt. However, many teachers in the study were taken aback by the vast variety of methods. They were afraid to explore new things and afraid that making adjustment would take up their time while the syllabus still needs to be covered. Instead, teachers should challenge themselves to adapt to the new approach of teaching-learning and



assessment as an added value to their traditional practice. To overcome teachers' negative beliefs, Pritchett and Pound (1993) suggested some positive mindsets that teachers could embrace the following: "teachers must view that progress is not a problem, but a challenge, and the reward for their arduous work is multiple. They must make the changes work by inventing the future, controlling their attitude, taking some ownership of the changes, choosing to improve skills, being tolerant of management mistake, and leading a normal life".

Teaching-learning Factor

The Standard-based system is a newly introduced practice to lower level primary school students in Malaysian public schools. There are many workload capacities to teachers in adopting this new concept of teaching and learning. One of the teachers' workload capacities in this study was to restructure their prior knowledge to encompass new knowledge practice. The challenge was to acquire a deep, meaningful understanding of the new concept of classroom assessment. Much of the information needed to make effective teaching decisions emerges in the context of assessment practice. Findings revealed that the vast majority of teachers agreed that they did not have enough time for planning the teaching and learning factor, and the syllabus is incomplete with the integration of assessment into teaching-learning.

Motivating Students' Factor

It was observed in the study that classroom assessment information had not been fully utilised by the teachers. In fact, teachers seldom made use of the assessment results to guide them in their actual teaching. They were more content-centred and the majority of them tend to teach according to the pace of the average students in the class. They did not know how to cope with the range of individual differences, and they lacked of knowledge on the effective use of such assessment results. Knowledge and practice are antagonistic when one hinders the other. Indeed, attempts to 'unlearn' the set of routine and new approaches can be difficult and challenging. To many teachers, it is important to help them understand that 'letting go' of previously learned ideas and routines or incorporate new information into their practice and choose what to abandon and what to keep or modify, are parts of what it means to be a lifelong learner and an adaptive expert. For a teacher to be an adaptive expert, discovering the need to change is perceived not as a failure but instead, as a success and an inevitable, continuous aspect of effective teaching.

Support Group

The findings of the study showed that the real challenge that teachers faced was misinformation (Curriculum development division, 2011). Teachers have had in-house training on a whole variety of tips but only few worked consistently for them. This is because they were only getting parts of the picture. None of these quick tips from courses work in isolation. Teachers need support to stay informed about developments in the education policy, figure out answers to their questions, find alternatives for teaching practices and talk on related issues. Within this context, professional communication in the staffroom has become a form of continuing education for teachers.



Professional Development Factor

A number of studies reported on the lack of classroom assessment training in Malaysia via professional development program (Chan et al., 2009). Norliza (2010) defined professional development in Malaysian school context as the enhancement of teachers' skills and competencies as mandated by ministry circulars. Consequently, continuous professional development has become a means of coping with change, whether imposed by the policy initiative, or voluntarily sought and participated by teachers themselves. Undeniably, the implementation of performance standard sets workload capacity to teachers to learn, relearn and unlearn some of their common knowledge and practices of classroom assessment.

Conclusion

Many teachers in this study shared similar problems in standard-based performance assessment system because they did not have enough exposure in accessment. Consequently, they got worried and complained about the new assessment system. Yasmin (2011), in her study of the establishment of smart schools in Malaysia, found that teachers who were not actually prepared for a transformation in teaching practice would revert to teacher-centered teaching. Her findings indicated that teachers failed to integrate the ideal teaching into a transformed culture due to the misconception of working knowledge and lack of training. This study showed that the capacities that many teachers faced were also closely related to high workload and poor time management. The results in this study showed that teachers need to reframe their teaching-learning, and focus on the workload capacity of teaching more effectively. For teachers, there are many ways to learn to teach creatively within these constraints, however, the constraints must be duly acknowledged and taken into account as workload capacity. Therefore, it is hoped that this current study could shed some light in the efforts of improving standard-based education system, and serves as a guideline for future development and transformation in Malaysian education system.

References

Black, P.J. (1998). *Testing: friend or foe?* London: Falmer.

- Boon, P.Y. (1991). The Assessment System in the new curriculum within the Ecology of a School: A Case Study. M.Ed. University Malaya. *Unpublished M.Ed. thesis*, University Malaya
- Bryne, D. (2002). Interpreting Quantitative Data. London: SAGE Publication Ltd.
- Chan, Y. F., Sidhu, G. K. & Md. Rizal, M. Y. (2009). *School-based assessment: enhancing knowledge and best practices.* University Publication Centre (UPENA), UiTM.
- Clark, I. (2011). Formative assessment and motivation: Theories and themes. *Prime Research on Education Journal*. Vol. 1(2) pp. 027-036. <u>www.primejournal.org/PRE</u>
- Cohen, L., Manion, L. & Morrison, K., (2007). *Research Methods in Education*. Sixth Edition. Routledge Taylor & Francis Group.
- Curriculum development division. (2011). Q&A Session in Induction Course for Year 2 Mathematics National Master Trainers. Glory Beach Resort, Port Dickson.
- Dudley, J. R. (2005). Research Methods for Social Work: Becoming consumers and producers of



research. USA: Pearson Education, Inc.

- Examinations Syndicate. (2011). Surat Siaran Lembaga Peperiksaan Bil. 3 Tahun 2011: Pemakluman Pentaksiran Berasaskan Sekolah (PBS) Di Sekolah Rendah dan Menengah Rendah. KP.LP.003.07.14.05 (1)
- Fullan, M. (2007). *The New Meaning of Educational Change*. Fourth Edition. USA: Teachers College Press.
- Gray, D. E. (2004). *Doing Research in the Real World*. London: SAGE Publications.

Harlen, W. & Deakin Crick, R. (2003) 'Testing and motivation for learning', Assessment in Education: Principles, Policy & Practice, 10(2), pp. 169-207

- Kirton, A., Hallam, S., Peffers, J., Robertson, P., & Stobart, G. (2007). Revolution, evolution or a trojan horse? Piloting assessment for learning in some Scottish primary schools. *British Educational Research Journal*, 33(4), 605-627.
- Massell, D. (2008). The current status and role of standards-based reform in the United States. Paper prepared for the National Research Council Workshop on Assessing the Role of K-12 Aca-demic Standards in the States. Available at: http://www 7.nationalacademies.org/cfe/Massell%20State%20Standards%20Paper.pdf
- Morrison, K. & Tang, F.H.J. (2002). Testing to destruction: a problem in a small state. Assessment in Education, Vol.9, No.3. pp. 289- 371.
- Norliza, K. (2010). Understanding Teachers' Identity as Learners: The case of Malaysian teachers. Dissertation for Ph.D. In Education. University of Bristol.
- Novak, J. D. (2010). Learning, Creating, and Using Knowledge: Concept maps as facilitative tools in schools and corporations. *Journal of e-Learning and Knowledge Society*. Vol.6, n.3, (pp. 21-30).
- Pritchett P. & Pound R. (1993). *The Employee Handbook for Organizational Change*. 10th Printing. Pritchett Publishing Company. USA.
- Sadler, D. R. (1989). Formative assessment and the design of instructional systems. [Electronic version] *Instructional Science* 18:119-144.
- Taras, M. (2005, Dec.). Assessment Summative and formative some theoretical reflections. British Journal of Educational Studies, ISSN 0007-1005, Vol. 53, No. 4, pp 466-478
- Yasmin O. (2011). Autonomous learning and the smart school English language courseware, unpublished dissertation of Ph.D. Universiti Sains Malaysia.