Effects of Teachers' Teaching Competencies on Students' Academic Performance Mediated by Holistic Centered Learning Style Based on SUMUR Program at Secondary Religious Schools

Nordiana Mohd Nor
PhD Candidate, Faculty of Islamic Contemporary Studies, Universiti Sultan Zainal Abidin,
Malaysia
Email: nordianamohdnor@gmail.com

Rahimah Embong
Faculty of Islamic Contemporary Studies / Faculty of General Studies & Advanced Education
Universiti Sultan Zainal Abidin, Malaysia
Email: rahimahembong@unisza.edu.my

Habsah Muda
Faculty School of Management Science, Faculty Economic and Management Science
Universiti Sultan Zainal Abidin, Malaysia

Kamariah Yunus
Faculty of Language and Communication
Universiti Sultan Zainal Abidin, Malaysia

Juliana Mohd Nor
Academy of Language Studies Universiti Teknologi MARA, Terengganu Branch, Malaysia

Abstract
The preliminary presumption is that academic teachers are competent in teaching based on the degree they graduated in. It is claimed that teachers with low quality competency in teaching are those who are not skilled and practice passive teaching method. Recent reviews on education mostly talk about creating 21st century teaching environments in schools therefore student-centered classroom approach for Malaysian students which is implemented with clarity and understanding that, can engage teachers and students in new ways should be studied. This paper seeks to determine the factors that contribute to excellent result achievement by students in relations to teachers' competency. The study employed a mixed-method approach using a quantitative technique of semi-questionnaire survey on

teaching competencies for teachers from selected excellent religious secondary schools under BPI (*Islamic Education Department, MOE*) that underwent the Virtuous Student Character Program (SUMUR) and qualitative in the form of interview for Sic+, PPD excellent guide teachers from the selected SABK and SMKA secondary schools (School Improvement Specialist Coaches (SISC+) under the Malaysian Education Blueprint, PPPM 2013-2025.). The independent variable is teacher competencies, the mediator is holistic centered learning and the dependent variable is student academic performance (based on Malaysian Education Certificate "*SPM*" 2015 result) as per specified in each instrument. The findings will contribute towards a better understanding on how teaching competency affects students' academic performance in relations to Holistic Centered Learning and the SUMUR program.

Keywords: Teachers' Teaching Competency, Holistic Centered Learning, Student Academic Performance, Multiple Intelligences Learning Style, SUMUR.

Introduction
Support for student learning can take many diverse forms and some support activities can be directly perceived by the students but some others are less apparent. Studies conducted by Zamri et. al (2012); Abdul Kadir (2002); Pushpalatha (2006); Grove and Bretz (2007); Tobias and Duffy (2009); Hartini (2010); Taskinsoy, (2012); Norazila (2012); Katharina (2016); and Jayaron and Mohammad (2016) all see the effects of teaching on student achievement. These studies show that students exhibit more understanding and more positive impression when they are exposed to student-centered learning which produced students with higher academic achievement rather than teaching students using the traditional spoon-feeding approach. According to Gibbs (1992) student-centered learning also refers to the process of giving autonomy or independence as well as extensive control of the students in the classroom in mastering the subject that focuses on the needs of students. Different students have different ways of understanding as elaborated by Sean Whiteley in the Memletic Learning Styles Inventory (Memletic Advanogy, 2015). Seven different learning styles and abilities are recognized by this inventory in accordance with seven kinds of intelligence indicated by Gardner in 1983: verbal (linguistic), visual, aural, logical and physical and with regard to our relations with others, solitary and social learning styles (Zajac, 2009). The understanding of this learning styles inventory which is based on the multiple intelligences theory, combined with adequate teaching competencies would result in a holistic centered learning (HCL) which can engage the learning process effectively. In the discourse on Student-Centered Learning as a 21st century approach, positive teaching is explored as an innovative method for transforming common classroom management struggles into opportunities for positive change and for changing passive behaviours into active interactions as reported by Abdullah (2004) ; Katharina (2016); and Jayaron & Mohammad (2016).
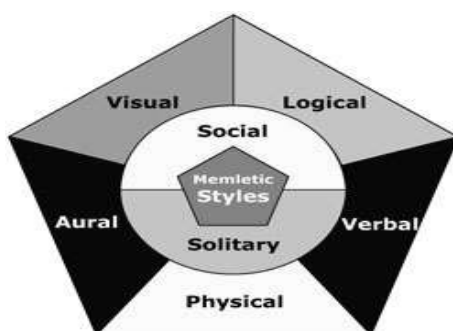

Figure 1: Memletic learning styles combine with multi intelligence

(Source:http://www.learning-styles-online.com/overview/)
Malaysian national curriculum is exam-driven and content-based. Therefore, it is vital for teachers to be competent in teaching. Competent teachers are more likely to teach in active classrooms according to Gibbs (1992) and are significantly more confident in their abilities, including their ability to deal with the changing environment and students will enjoy real improvements in learning. Constructivists stressed that knowledge is constructed by individuals, and not passively acquired. Centered learning uses a teaching method that applies a student-centered approach that involves self-directed learning with the emphasis on active participation, critical inquiry, self-regulation and self-assessment abilities. Independence and individuality in constructing student's understanding is the result of the "hands-on, minds-on" approach. This study was conducted to assess the teaching competency of teachers in the research schools based on the current student-centered teaching stream, taking into account the Multi Intelligent and Memletics learning style inventory as Holistic Centered Learning (HCL) as intermediary factors that improve student achievement.

Literature Review
Traditional Instruction Practice Changing Lane
The current curriculum is packaged in thick textbooks with so much content that teachers resort to telling students what they know and students simply chew the facts to memory. The packed curriculum leaves little space for students to submerge into a deep understanding of the subject or to develop lifelong skills such as critical thinking, problem solving, and communication. The traditional passive view of learning involves situations where material is delivered to students using a lecture-based format, but a more modern view of learning is constructivism Carpenter (2006) where students build their own versions of reality rather than simply absorbing the versions presented by their teachers. Therefore, learning is not committing a set of facts to memory, but the ability to reuse resources, to find, to evaluate, and apply information. The broadest development of the whole person at the cognitive and affective levels is addressed as Holistic education (Singh, 1996). It aims for the fullest possible human development enabling a person to become the very best or finest that they can be and develop fully 'those capacities that together make up a human being' (Forbes, 2003). The holistic vision includes a sense of the whole person who is connected to his or her surrounding context and environment. (Miller, J. 2004). This research addresses these concerns by focusing "how we learn" and reviewing the literature on what works to improve learning.

Diversity of Student Centered Learning (SCL) Theories
Constructivism evolved from a number of learning theories, each contributing valuable holistic ideas that have shaped the current understanding. However, constructivism is often associated with the pedagogic approaches that promote active learning or learning by doing (Tobias & Duffy, 2009). In student-centered instruction, students and teacher share the focus. Instead of listening to the teacher exclusively, students and teachers interact equally. Group work is encouraged, and students learn to collaborate and communicate with one another (Concordia University, 2010). This approach includes active learning, in which students solve problems, answer questions, formulate questions of their own, discuss, explain, debate, or brainstorm during class; cooperative learning, and inductive teaching and learning. Student-centered learning is grounded on constructivist learning theories (Singh, 1996). Among the big names in constructivist theories that contributed in the student-centered learning development study are: John Dewey (1859–1952), Maria Montessori (1870–1952),

Władysław Strzemiński (1893–1952), Jean Piaget (1896–1980), Lev Vygotsky (1896–1934), Edgar Morin (1921–1900), George Kelly (1905–1967), Humberto Maturana (1928–1999), Herbert Simon (1916–2001), Heinz von Foerster (1911–2002), Paul Watzlawick (1921–2007), Ernst von Glasersfeld (1917–2010) and Jerome Bruner (1915– now), whereby all these constructivists support active learning classrooms.

Student's intellectual development takes place through continuous engagement in active construction and deconstruction of knowledge through interaction within the environment. In Piaget's opinion, 'curiosity is a vital overflow, an expression of an abundant organic energy, a physiological uneasiness that leads a student to get "into everything" – to be reading, packing, pounding and prying inquisitiveness' (Chabeli, 2006). The notion of active construction and deconstruction of knowledge through interaction within the environment is also echoed by other constructivist theorists such as Vygotsky (1963) as well as Johnson et al. (1991) and Slavin (2003) who state that students learn actively, learn better and work to improve their performance. Holistic centered-learning which implements the seven intelligences in teaching is a good approach and should be used in teaching and learning in order to create a learning environment that is engaging and vibrant with students, enhancing the quality of student performance in examinations. According to Husin & Abdul Aziz (2003), Abdul Kadir (2002), Tyma, A. W. (2009), Weimer, M. (2002) and Abdul Rahim (1999), students can work together in the classroom to maximize their learning through active learning.

Problem Statement
Issues claimed that teachers with little quality competency in teaching are those who are not skilled and practice passive teaching method. A study effect on teacher teaching competency on students' academic performance mediated by holistic centered learning based on SUMUR program at secondary religious schools in Terengganu, Malaysia.

Significance of The Study
One of the advantages of an education that is based on student-centered learning by implementing the multiple intelligence modalities through the Holistic Centered Learning approach (HCL) is, it can help teachers to rethink and adapt their teaching competencies in line with current global needs. Active learning by implementing the teaching techniques under HCL can enhance students' confidence because they will be less dependent on teachers and textbooks, and become more engaged in their lessons in the classroom. Another question that was formulated for this research is regarding the impact of SUMUR Program on students' personality and whether it has any effect on the students' academic performance. In this study, the researcher has combined two of the biggest theories of constructivism, i.e. the theory by Maria Montessori on holistic learning proposed in 1965 which is focusing on child's development and the cognitive theory by Howard Gardner on multiple intelligences proposed in 1983. These two theories are shared concept with the Memletic Learning Styles Inventory explained by Sean Whiteley to be the basis for the HCL approach. Therefore in this study, the researcher seeks to define HCL as a new teaching strategy for teachers in engaging students using multiple intelligences learning styles as the educational tools to develop continuous engagement in active classroom construction, focusing on learning modalities for excellent student performance in academic.

Mediator

In this study, Holistic centered learning style is regarded as a mediator in the conceptual framework. According to Baron and Kenny (1986), a given variable can be considered as a mediator "to the extent that it accounts for the relation between the predictor and the criterion. Mediators explain how external physical events take on internal psychological significance. Whereas moderator variables specify when certain effects will hold, mediators speak to how or why such effects occur". The most common way of mediation modeling is as follows:
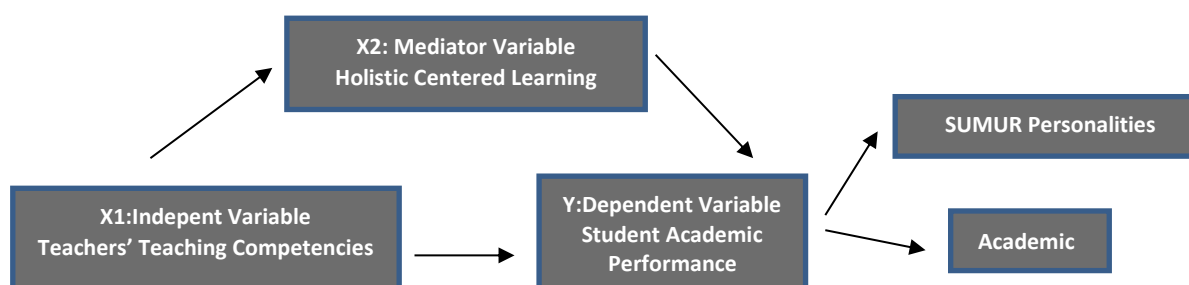

Figure 2. Interaction of mediation on research study based on Baron and Kenny's (1986) framework.

Teachers' Teaching Competencies

The term "competence" describes the personal capacity to cope with specific situational demands. Competence is, by definition, learnable and teachable skills that are related to the way in which the teacher has carried out the activities and what results have been achieved. (Klieme et. al., 2008; Weinert 2001).

Profesional teaching competence also refers to the individual's ability to cope with specific occupational situations, and thus goes beyond more global approaches such as the personality paradigm in teacher research (Bromme 2001). Moreover, teaching competence encompasses both the ability and the willingness to act (Connell et. al., 2003) and thus describes a broader spectrum of personal characteristics than the primarily knowledge-based concept of teacher expertise in teaching effective method (Bromme 1997, 2001). Finally, a key premise of the research is how professional competence is malleable—and thus teachable and learnable in the context of professional development and how it impacted student performance.

Student Performance

In this study, student performance will be assessed based on two factors; academic performance and student personality. The two factors are defined as:

First factor: Academic Performance. In the measurement of academic performance, the teacher gives grades and GPA on the level of student achievement. Grades are composite measures that account not only for students' content mastery, but often for other factors, such as their class participation, attitudes, progress over time, and attendance (Guzman, 2003). The study the researcher uses the School GPA from SPM 2015 Results and the Terengganu state SPM students as result marker due to their excellent achievement throughout a decade performance record.

Second Factor: SUMUR Personality. It is based on the Virtuous Student Character Program (SUMUR). The goals of this program introduced by Islamic Education Department since 2007 are to; produce students who have the personality commendable and could be emulated by other pupils; always seeking knowledge for happiness in this world and the hereafter; practice excellent health care in daily life; are resilient in the face of life's challenges, and strive to improve leadership and passionate patriotism. Students are an important asset for the future of the country that need to be addressed, cared for, guided, and appreciated for their existence, loved every moment so that they can develop their potential according to the *Sunnah* and moral values (BPI, 2017). To this date there is no research on SUMUR evaluation that is assessed using questionnaires. In this study, SUMUR profiles are evaluated by observing behavior, reading verbal and non–verbal signals, seeing how they take care of their belongings, revise Quran and doing exercise given by teacher, and even how they dress. The pertinent question here is, is there a link between student profile and student grades? Studies have shown that students who exhibit more interest, motivation and skills are more likely to excel in any subject especially when the method of teaching is focusing on the student's multiple intelligences personality profile, as reflected in the statement by Dr. John Patrick Golden in his book'Personality Profiler' report (Golden, J.P. 2010). The following list is the 18 Terengganu state schools that achieved the top ranking below National GPA in the national SPM 2015 result, which are involved in this research:

1. Sekolah Menengah Agama Maarif, Kampong Raja, Besut
2. Sekolah Menengah Agama Kampung Laut, Marang
3. Sekolah Menengah Agama Sultan Zainal Abidin, Kuala Terengganu
4. Sekolah Menengah Agama Mahmudiah, Hulu Terengganu
5. Sekolah Menengah Agama Marang, Marang
6. Sekolah Menengah Agama Sultan Ismail, Dungun
7. Sekolah Menengah Agama Khairiah, Kuala Terengganu
8. Sekolah Menengah Agama Al Falah, Kemaman
9. Sekolah Menengah Agama (Arab) Sultan Zainal Abidin, Batu Buruk
10. Sekolah Menengah Agama Ittifakiah, Jertih
11. Sekolah Menengah Agama Setiu
12. Sekolah Menengah Agama Imtiaz ,Kampong Raja, Besut
13. Sekolah Menengah Agama Nurul Ittifaq,Kuala Besut, Besut
14. Sekolah Menengah Agama Wataniah,Hulu Besut, Besut
15. SMKA Sheikh Abdul Malik, Kuala Terengganu
16. SMKA Dato' Haji Abas, Tok Jiring, Kuala Nerus
17. SMKA Durian Guling, Kuala Berang
18. SMKA Kuala Abang, Dungun

Excellent Gpa Result
For the measurement of academic performance achievement, this study uses the grades given to the students based on GPA. Grade Point Average (GPA) is a composite measure that reflects students' content mastery as well as other factors such as their class participation, attitudes, academic progress, and attendance (Guzman, 2003). An approach for development which links syllabus, teaching and evaluation are best known as a powerful method, among others, that develop student enthusiasm and excellences (Cauley & McMillan, 2010).

Table 1
Index Chart on National Average Grade (GPN) Year 2010-2015.

YEAR	NATIONAL GPN Index	TERENGGANU GPA Index	+/-
2010	5.19	5.03	+0.16
2011	5.04	4.92	+0.12
2012	5.08	5.01	+0.07
2013	4.93	4.09	+0.84
2014	5.08	5.00	+0.08
2015	5.15	5.06	+0.09

Source: http://jpnterengganu.moe.gov.my/bm/index.php/info-spa

Table 2
Index Chart on State Average Grade (GPA) for SPM 2015.

RANKING	TOP STATES	EACH STATES SPM 2015 GPA INDEXS	
SPM NATIONAL INDEX		**5.15**	+/-
1.	Pulau Pinang	4.83	+
2.	Wilayah Persekutuan Labuan	4.85	+
3.	Negeri Sembilan	4.85	+
4.	Pahang	4.94	+
5.	Kelantan	5.03	+
6.	**TERENGGANU**	**5.06**	**+**

Source: http://jpnterengganu.moe.gov.my/bm/index.php/info-spa

Research Design and Methodology
Research Design
The study employed a mixed method approach, using quantitative technique involving a survey semi-questionnaire instrument for teachers from the selected excellent SABK and SMKA secondary schools and qualitative in the form of interview for Sic+, PPD excellent guide teachers from the SABK and SMKA secondary schools (School Improvement Specialist Coaches (SISC+) under the Malaysian Education Blueprint, PPPM 2013-2025.). The independent variable is teacher competencies, the mediator is holistic centered learning and the dependent variable is student academic performance (based on SPM 2015 result) as per specified in each instrument.

Population and Sampling
181 SPM teachers and 350 SPM students from selected religious secondary schools in Terengganu from the result SPM 2015 that achieved excellent results with the GPA below 5.14 according to the National GPA. The validity of the respondents is verified using Krejcie & Morgan (1970) for a representative statistical sample in an empirical research as an effective method of determining sample size.

Research Instruments
Questionnaire is a fundamental tool for acquiring information on public knowledge and perception of the teacher population of the study. The wording and phrasing of the questions were reevaluated to avoid lack of specific information (Hawkes & Rowe, 2008). In order to overcome this problem, the researcher used open or closed questions and together with objectives with a 10-point Likert scales answers. A ten-point Likert scale format on a

continuum from strongly disagree (1) to strongly agree (10) was used as a response to the statements in the questionnaire. According to Zainudin (2015) a ten-point Likert scale was used to enable the researcher to assess more accurately the beliefs or opinions that are more frequently considered in terms of grading in the closed questionnaires.

Survey Instrument Design
The questionnaire design (quantitative) is the most appropriate method to collect data in this study. The instrument consists of four parts (1) Demographic data of the Respondents/ teachers, (2) teacher competency assessment adopted and adapted from Murcia et.al., (2015), (3) Holistic Centered Learning classroom activities which are based on the modified version of the Memletics Learning Styles Inventory prepared by the researcher which had been certified its validity (4) Data for student academic based on the SPM 2015 examination results. The questionnaire was built in dual-languages i.e. in Bahasa Malaysia and English.

Whereas, the open questions in the questionnaire were focused on the mediator variable and the responding variable answered by the teachers who taught SPM 2015 classes in the selected schools.
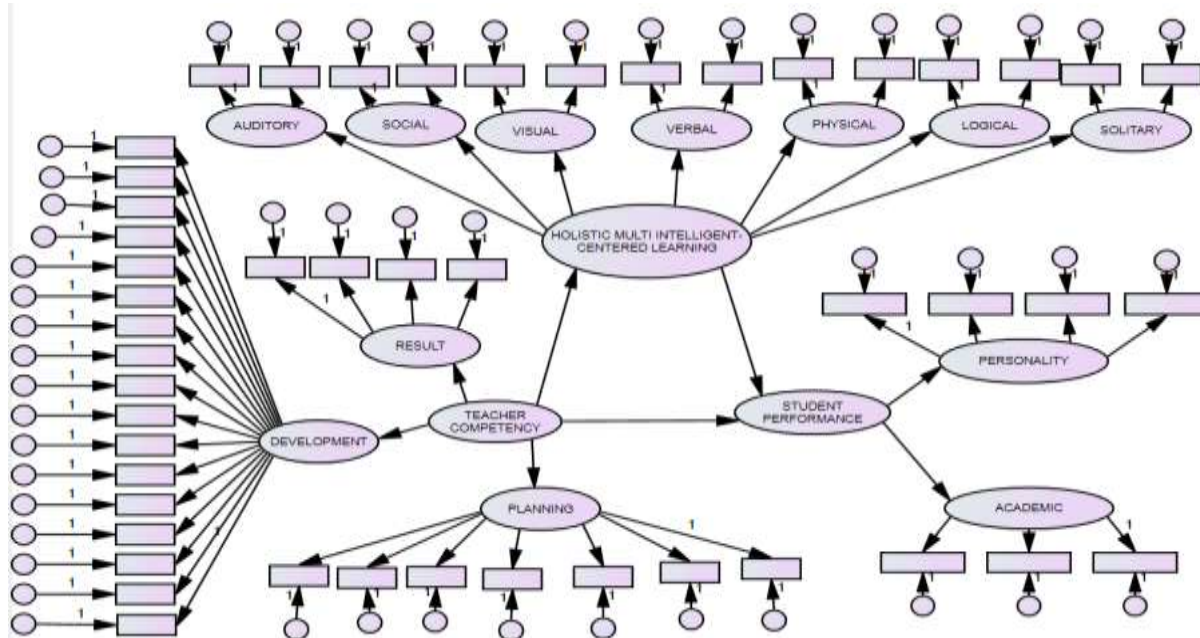

Figure 3: Initial Framework Pathway analysis for SEM AMOS

Data Analysis
All data in the questionnaire were keyed-in using the SPSS software for descriptive statistics (percentage, mean, median, mode), measures of central tendency (range, standard deviation, variance) and forecasting (linear regression, regression), while the SEM AMOS Software programs was utilized to obtain test factor analysis (EFA, CFA). The questionnaire data is designed to answer the research questions and to prove in accepting or rejecting the research hypothesis made in the study. Three parts of the questionnaires were analyzed using the Path Analysis in SEM AMOS and the second instrument, i.e. the Structural Interview, was qualitatively analyzed in supporting the data.

Table 3
Data analysis of RQ, RO and Hypothesis.

Research Question (RQ)	Research Objective (RO)	Hypothesis	Analysis Method	Summary Analysis
1. Do teacher's teaching competencies have a significant and direct effect on student academic performance?.	*To examine that teacher's teaching competencies have a significant and direct effect on student academic performance.*	*H1: Teacher's teaching competencies have a significant and direct effect on student academic performance.*		AVE. 0.5 r=1 Report Significant Correlation r=1 R^2 =0.00-1.00 T-Test = β= 0.8 P < 0.01 Realbility > 0.7 AVE > 0.5 Skewness relation Reference Hair et. al (2010)
2. Do teacher's teaching competencies have a significant and direct effect on Holistic Centered Learning?.	*To find out the extent to which teacher's teaching competencies have a significant and direct effect on Holistic Centered Learning.*	*H2: Teacher's teaching competencies have a significant and direct effect on Holistic Centered Learning.*		
3. Does the Holistic Centered Learning method have a significant and direct effect on student academic performance?.	*To determine whether Holistic Centered Learning method has a significant and direct effect on student academic performance.*	*H3: Holistic Centered Learning method has a significant and direct effect on student academic performance.*		
4. Does Holistic Centered Learning method mediate the relationship between teachers' teaching competencies and student academic performance?.	*To identify whether Holistic Centered Learning method mediates the relationship between teachers' teaching competencies and student academic performance.*	*H4: Holistic Centered Learning method mediates the relationship between teachers' teaching competencies and student academic performance.*	Path Analysis SEM AMOS	

Conclusion and Implications
This study offers a SEM model for presenting a pedagogical experience in such a way that teaching competency skills, student performance, HCL and SUMUR personality can be assessed. This would contribute towards delivering improvements in the education fundamental and teacher competency in teaching in a critical context of the school.

Corresponding Author
Dr. Rahimah Embong, PhD. is Associate Professor at Department of Education, Dakwah & Islamic Civilization at Faculty of Islamic Contemporary Studies as well as Deputy Dean (Student Affairs & Alumi), Faculty of General Studies & Advanced Education at Universiti Sultan Zainal Abidin (UniSZA), Gong Badak Campus, 21300 Kuala Nerus. Terengganu, Malaysia.
Email: rahimahembong@unisza.edu.my

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