

Development of Effective School Model for Malaysian School

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Abstract: The purpose of this research is to develop an effective school model based on the Malaysian context. To obtain experts' consensus, the Delphi technique has been chosen as the method of study. Some 15 experts from various fields with wide experience in school leadership have been chosen as respondents. The use of four rounds of Delphi Techniques in this study has successfully identified seven contributory aspects and their strategies to make a school more effective. Furthermore, the experts' consensus has also agreed that all 138 items in the fourth round of the Delphi Technique can be used as the content of the Malaysian Effective School Model.

Key words: School model • Malaysian context • Delphi Technique • School Model

INTRODUCTION

In most countries, the agenda for improving schools by improving students' achievement reflects the interests of policy makers in reforming education in their country. In fact, the statement precursor to effective schools research, [1] that schools make a difference to their aspirations have been to implement the agenda.

Thus, studies related to effective schools have been carried out widely in all parts of the world since the early 1980s such as in Britain, the Netherlands, Israel and Australia taking into account the findings of studies done by researchers on effective schools in the United States [2] where the implementation of such studies have been done by individuals with high levels of knowledge and skills in the field of school effectiveness to identify factors contributing to the success of schools [3].

Similarly in Malaysia, local researchers have made the opinion of Peter Mortimore (1995) as the basis for their study [4]. However, a study by the World Bank Operation Evaluation Department in 1999 found that schools in developing countries that have socio-economic status have a low face pressure to implement effective programs of school-based research findings from developed countries [5] because schools need strategies appropriate to the local context, problems and development needs (Md. Abdul Karim. Nor, 1998; [6, 7]. Therefore, researchers in Malaysia need to form a model

of effective schools with the appropriate context, problems and development needs in Malaysia. Hence a Delphi study was undertaken to develop a successful model of school effectiveness based on opinion agreement among a group of local individuals who are recognized for their expertise in the field of education, especially school leadership.

Problem Statement: When a school operates a policy of open doors the achievement of reputation will start when they first opened the doors to the public. Reputation will be identified through observation and perception of the wider stakeholders in education such as students, parents and the community. They want schools to produce successful students who have the characteristics of human capital. Hence, efforts to develop reputed schools become increasingly important and challenging [8] and schools strive to develop a reputation for excellence to ensure that their actions coincide with the requirements of a constantly changing environment [9] and such action should be guided by the views through brilliant scientific research [10].

Concurring with the recommendation above, research on effective schools is able to serve as basic guidelines for a school to achieve success because the focus study is comprehensive and not only to focus on teaching and learning process [8]. However, the number of studies on effective schools in Malaysia is still low [11]. Implications, there are various definitions given by researchers and

local environment that will cause problems to develop effective school model in Malaysia [12]. Therefore, to solve these phenomena, this study is aimed at adding to the number of effective schools research studies; it is able to support the findings of previous studies either in or outside the country. Furthermore, the study will refine and elaborate detailing the practice and theoretical models based on the context of effective schools in Malaysia.

Purpose of Study: Overall, the study was conducted to obtain the agreement of opinion among a group of local individuals who recognized their expertise to develop a model based on the context of effective schools in Malaysia.

Research Questions: The following research questions will be answered based on research findings that have been found, namely:

- To what extent is there agreement among the panel of experts associated with the characteristics of effective primary school based in the context of Malaysia?
- To what extent is there agreement among the panel of experts associated with the strategy to implement the main features of effective schools based on the context in Malaysia?

MATERIALS AND METHODS

Delphi technique has been used as the main methodology in this study whereby the selection of participants is an important aspect that determines the successful implementation of the study. Helmer (1968) [13] in [14] agreed with the statement of the opinion that the selection of participants in a Delphi study should be made carefully because a mistake in choosing them will affect the results (findings).

Study Sample: Selection of participants in this study is among individuals who have a level of knowledge and skills in high school leadership. However, [13, 14] said that it was difficult for researchers to give the title of Delphi “experts” to an individual based solely on community rating on the academic qualifications, level of contribution and career achievement. Martino (1983) supports the statement by saying that the individual experts who have specialized knowledge related to their respective fields but also other individuals also have expertise in any other field. Therefore, no one can declare themselves experts and assume that other individuals are not categorized as experts. Hence, to overcome these phenomena, certain criteria must be identified to determine an individual as an expert [15, 16]. For the purpose of this study, the researchers have set criteria such as the following as basic guidelines for selecting participants in this study, namely:

- Individuals who have experience, knowledge and expertise in school leadership over 10 years.
- These individuals have experience working as educators in school institutions for more than 10 years.
- Willingness of these individuals to join the four sessions or rounds of the Delphi study.

Coinciding with the criteria that have been set, a total of 15 study participants were selected and their characteristics are shown in Table 1.

Table 1 shows a total of 11 study participants who already have experience working in the field of school leadership for over 20 years. Two of them are academic staff of public universities, Inspector of Schools (4), Education Officer (1), Outstanding Principal (3) and Excellent Teacher (1). The rest, 4 participants, have only research experience between 13 to 19 years; they are a school inspector and 3 Excellent School Teachers. In fact, from the findings of this study, it can be summarized that the study participants are also experienced as educators in the school institution for over 10 years.

Table 1: Study Participants Experience in School Leadership

Job Title	Experience in Leadership (years)				Total
	< 5	6-12	13-19	> 20	
IPTA Academic staff	-	-	-	2	2
School Inspector	-	-	1	4	5
Education Officer	-	-	-	1	1
Excellent Principal	-	-	-	3	3
Excellent Teacher	-	-	3	1	4
Total (person)	-	-	4	11	15

Data Collection Procedure: Data collected in this study involved two stages as follows, namely:

First Stage: In this stage, the process of data collection activities were conducted through reviews of literature materials as below; the review was intended to develop the interview protocol:

- Statements relating to the practices of effective schools were collected and analyzed from early studies of effective schools starting from the pre-school effectiveness movement explored by Professor James Coleman and colleagues (1966), school effectiveness movement by [1] until the Effectiveness and School Improvement movement by Lezotte in 1989.
- Literature reviews were also conducted on the local studies such as [17, 11] and experience of the researcher as a Graduate Education Service Officer from 1991 until 2003 was also utilized.

Next, content validity of the interview protocol was determined by two experts in the field of school leadership.

Second Stage: In the second stage, a Delphi study involving four rounds or sessions was implemented to develop an effective school model based on agreement of views among a group of 15 individual experts. However, before starting the research, the researchers sought permission from the Education Research and Planning Division, Ministry of Education, to involve the experts as participants in this study.

First Round: Structured interviews were conducted in the first round of the Delphi study in which the interview protocol constructed in the first stage has been used as a guide for each study participant. Furthermore, the findings of this interview were used to create basic items in the questionnaire instrument used in the second round of sessions.

Second Round: In the second round of sessions, study participants are required to interact with questionnaire instruments that were built in the first round of the Delphi study. Hence, researchers have found each participant to describe the research methods to answer items in such instruments as the following:

- Study required participants to determine their level of agreement of each item that has been submitted through the 5 point Likert scale.
- They are required to identify and develop content through the addition of such instruments and details of the proposed statement for each item in the questionnaire instrument.

Third Round: Next, the session in the third round Delphi study is a continuation of the second round related to questionnaires aspects of the use of instruments in which the field studies conducted are intended to reach an agreement in opinion among the study participants through the expression of their level of agreement on new and existing items based on a 5 point Likert scale. For the existing item, if their level of agreement went beyond the majority opinion in the last round of sessions, they are required to give reasons. However, they are not allowed to add any items in this round.

Fourth Round: In the fourth round of sessions, the study participants still interact with the instrument questionnaire through their actions as they did in the third round of sessions to bridge the gap in opinion among themselves.

Data Analysis Procedure: Data analysis in this study is based on the stages of the data collection process:

First Stage: Analyzing data in this stage of the review process involved the literature material as follows:

- Development studies and findings related to the study of this phenomenon. Through analyzing these processes, researchers have further simplified and used these findings to develop themes and subthemes for interview as follows in the protocol used in field studies for the second stage, namely:
- "Professional Principal Leadership" which involves subthemes "Teaching Leadership", "Transformational Leadership" and "The Efficient Resource Manager".
- "Conducive School Environment" which involves subthemes the "Orderly Environment" and "Physical facilities".
- "Focus on Teaching and Learning" which involves subthemes "Teacher Leadership" and "Curriculum".

- "High Hope" which involves subthemes "Hope In Comprehensive Practice", "Process Towards High Hope" and "Create an Environment that Challenges the Students' Minds."
- "Continuous Monitoring" involves subthemes of "Evaluation of Student Achievement", "Evaluation of School Achievement" and "The environment rich in data and information".
- "Collaboration between the Home and School" which involves subthemes "Relations With Parents" and "Relations with the Community".
- Relating studies and findings with studies of this aspect of research methodology.

Overall, the researchers strived to prevent themselves from being unfair in making a decision only to concentrate on one aspect of the study findings.

Second Stage: This stage involves analyzing data obtained during the four rounds of the Delphi study, as follows:

First Round: The session in the first round of this Delphi study involves interviews and analyzing activity data based on recommendations of [18] which involves three methods as follows:

- Reduce data. Researchers have repeatedly read the interview transcriptions that have been reviewed by each study participant to choose and summarized the ideas, while ignoring data that does not contribute to the importance of the study. Next, the process of encoding data was implemented.
- Verification or confirmation of data. In the second step, researchers perform verification process of obtaining data with inter-rater reliability of the code and unit of scale through the use of Cohen's Kappa agreement coefficient or value in order to ensure the validity and reliability of retrieved interview data. Besides searching agreement on Kappa coefficient values for data verification purposes, researchers also implement the code verification process and always check that the data has been analyzed so that these data represent groups that have been studied.
- Present data. Data collected through the interview process was shown in the form of the frequency of mention. The researchers have arranged the data based on priority themes and subthemes view

(ranking) among all 15 study participants of the study phenomenon. Next, themes and subthemes were used as the basis to build items in the questionnaire instrument using a 5 point Likert scale. Items were grouped as follows, namely: "The Principal Professional Leadership" has 33 items, "AConducive School Environment" (20), "Focus on Teaching and Learning"(25), "High Hope" (16) , " C o n t i n u o u s Monitoring"(18),"Collaboration between the Home and School"(12).

Second Round: During the second round of the Delphi study, questionnaire data were analyzed using descriptive statistical methods included mean, median and interquartile range because [19] considers that the Delphi study is a quantitative method to measure the tendency of each item. Mean score is used to view the order (ranking) the importance of items based on opinion among the study participants, while the median score is used to identify items needed to form a questionnaire based on instruments in the level of agreement among them as follows, namely:

- 5-Strongly Agree (SA)
- 4-Agree (A)
- 3-Somewhat Agree (SWA)
- 2-Disagree (D)
- 1-Strongly Disagree (SD)

In the 5-point Likert scale based on the above, an item has a very high median value if the scale is 5 and this means the majority of participants agreed with the item. Their views are categorized as "agree" if the median score is 4. Next, if the median score is 3 then the level of agreement on an item is "Somewhat agree" and if the median score is 2 then an item is in the category "Disagree". Similarly, the median score of 1 will give the impression that the level of agreement among the participants of the study is "Strongly Disagree" to an item.

Furthermore, the interquartile range score was used to measure the level of agreement from each participant of the study on items in the questionnaire instrument where the level of agreement is determined by interquartile score used by Williams, Boone and Kingsley (2004), [15, 20] in the field of education and adapted to the needs in this study, namely:

- 0 to 1 = high agreement (HA)
- 1.1 - 1.99 = moderate agreement (MA)
- = 2 = no agreement (NA)

Third Round: The questionnaire instrument built in the session in the second round Delphi survey was distributed to 15 participants in the same study. Their feedback was analyzed as in the data analysis session in the second round Delphi study. The findings of the session were used to build items for the instrument used in the questionnaire for the fourth round in the Delphi study.

Fourth Round: During the process of analyzing in the fourth round the same type of analysis was carried out as in the third round of sessions. It has been conducted on the feedback of each participant in the study. This was designed to get the best view of the level of agreement among study participants. Findings from data analysis in this round of sessions will be used to answer the research questions.

RESULTS

Findings presented in this study are in the form of items receiving agreement among the 15 study participants about the main characteristics of effective schools and strategies to implement the main features.

Effective Schools Model for Malaysian School: In determining the Effective Schools Model for Malaysia, information about the characteristics of effective primary schools and strategies to implement the key features have been obtained through feedback from each participant in the study session in each round of the Delphi study. During the first round, Delphi study data were analyzed using qualitative data analysis methods and findings were described in the subsection titled "Data Analysis Procedure". Meanwhile, responses from the data session for the Delphi study were further analyzed using Measurement-Based Trends-which involves the calculation of the mean, median and interquartile range (IQR).

Based on the Delphi study session the second round has produced seven key features of effective schools with 139 strategies that are grouped in themes for each school that used the model effectively. In other words, the findings of the Delphi study session in the second round has produced a 139-item questionnaire in which 124 items

were from the items available and the remainder, 15 items, are additional items. Of the 124 existing items found only 121 items achieved a high level of agreement among the majority of study participants, while three items do not achieve any agreement because the interquartile range (IQR) scores for these items is 2. Next, a questionnaire instrument for the third round of sessions has been built where the items were sorted by priority among the majority opinion of the study participants based on the scores namely mean score, median and IQR.

Next, analysis of data for the study session Delphi third round has produced seven key features of effective schools and 138 strategies in which one of the strategies to implement one of the key features of effective schools has dropped from the effective school model. In other words, all 138 items of the questionnaire instrument have reached a high level of agreement among the majority of study participants to be highly approved of the questionnaire instrument for the fourth round Delphi study session in which the construction of items for these instruments also takes into account the arrangement based on the item score-mean score, median and IQR.

Next, the number of round Delphi study session has been terminated so far as the fourth round of findings of data analysis has found a high level of agreement among the majority of study participants to agree to all the key features of effective schools and strategies to implement those features when reading scores of $IQR = 0$ or 1 and M score = 5 .

Hence in the fourth round session the findings from the Delphi process had succeeded in creating a Model for School Effectiveness and Improvement of Malaysian Schools containing seven main characteristics of effective schools. Some 138 strategies for implementation of the main characteristics based on the scales "High level of consensus" and "Highly Agree" ($IQR=0$ and $M=5$), scales "High level of consensus" and "Highly Agree" ($IQR=1$ and $M=5$) and scales "High level of consensus" and "Agree" ($IQR=1$ and $M=4$).

The following is a description of the design model based on scales related to the themes and subthemes.

The Professional Leadership of Principal

Instructional Leadership: The majority of study participants agreed to fifteen strategies for creating teaching style of leadership based on scales "High Level Agreement" and "Strongly Agree" ($IQR = 0$ and $M = 5$) and scales "High Level Agreement" and "Strongly Agree" ($IQR = 1$ and $M = 5$).

"The high level of agreement" and "Strongly Agree" (IQR = 0 and $M = 5$):

A total of fourteen strategies as follows were agreed at a high level of acceptance to become the model for effective schools, namely:

- Establishing the school vision and mission clearly;
- Shared vision and mission of the struggle;
- Having a high level of sincerity by demonstrating determination to work;
- Creating a culture that develops staff professionalism;
- Observe teachers teaching in formal and informal ways;
- Have the knowledge and skills to evaluate teachers;
- Talk to the teacher about rating outcomes;
- Provide facilities and equipment for smooth running of the teaching and learning process;
- Improve relations with those outside school (such as the PTA) to support schools to realize the vision and mission schools;
- Always motivate teachers;
- Identify knowledge and skills required by staff;
- Take care of teachers' welfare;
- Teaching in a period of time to serve as role models for the staff; and
- Act as chairperson for School Curriculum meeting.

"The high level of agreement" and "Strongly Agree" (IQR = 1 and $M = 5$):

There is a strategy as follows to establish leadership style of teaching that have been agreed at high level to approve the strategy is to become the model of effective schools:

- Obtaining raw materials for teachers to provide ABM / BBM (teaching aids).

Transformational Leadership: The majority of study participants have agreed on strategies to produce eleven transformational leadership style strategies based on scales "High Level Agreement" and "Strongly Agree" (IQR = 0 and $M = 5$).

"The high level of agreement" and "Strongly Agree" (IQR = 0 and $M = 5$):

All the eleven strategies as follows to produce a style of transformational leadership were agreed at a high level of acceptance in order to become the model of effective schools:

- Encourage, guide and move people towards the excellent school culture like creative, proactive and positive thinking;
- Establishing friendly relations with the school citizens through diverse activities within and outside school;
- Improve schools in line with the implementation of changes;
- Each appointment of principals should include increased knowledge and experience (seniority);
- Applying the concept of "Leadership by example";
- Possess attractive personality;
- Reduce excessive practice of protocol;
- Originator (initiator) of the practice of transformation;
- Give staff the opportunity to speak;
- Reduce emphasis on bureaucracy to facilitate school management; and
- Transformational leadership must start with bureaucratic leadership such as being strict with the school members.

The Efficient Resource Manager: The majority of study participants agreed to nine strategies to produce an efficient manager of resources based on scales "High Level Agreement" and "Strongly Agree" (IQR = 0 and $M = 5$).

"The high level of agreement" and "Strongly Agree" (IQR = 0 and $M = 5$):

The majority of study participants were found to have achieved high level agreement on approving nine strategies as follows to produce an efficient manager of resources to be the model of effective schools:

- Distribute resources fairly so that students can enjoy them;
- Wise in planning and distributing resource allocation;
- Creating School Finance Committee;
- Have the knowledge to manage resources such as managing the school budget;
- Be open to citizens' views of the school;
- Always feel themselves being watched by God;
- Provide guidelines related to the documented procedures using equipment and facilities;
- Provide guidelines related to the documented financial management; and
- Treat staff based on their maturity level (situations leadership).

Conducive School Environment

The Orderly Environment: A total of fourteen following strategies for creating a school environment have been endorsed by a majority of participants based on study of the scales "High Level Agreement" and "Strongly Agree" (IQR = 0 and $M = 5$) and "High Level Agreement" and "agree" (IQR = 1 and $M = 4$).

"The high level of agreement" and "Strongly Agree" (IQR = 0 and $M = 5$):

The majority of study participants were found to have agreed at high level to approve twelve strategies as follows to create a school environment that made for a systematic and more effective school model, namely:

- School citizens work as a team toward achieving the vision of the school.
- School citizens have a noble character.
- School Leadership support efforts to produce virtuous school citizens.
- The Principal has trust in the teacher's ability.
- Continuous staff development programs are able to strengthen the formation of school culture.
- Struggle to collect and share learning experiences.
- Every school has friendly relations.
- Drafting regulations based on the suitability of the current school.
- School citizens feel they are appreciated as a person.
- The existence of rules to control school members' behavior.
- School leadership practice and receive proposals from within and outside school.
- School culture shaped by the continued practice of rules.

"The high level of agreement" and "agree" (IQR = 0 and $M = 4$):

The majority of study participants were found to have agreed at high level to approve the following two strategies to create orderly school environment in the model of effective schools:

- Pupils are fairly confident with the teachers to pass sentence on them because they are given the opportunity to defend themselves; and
- Participate in various competitions outside the school so that outside parties are able to assess the school's capability.

Physical Facilities: A total of six strategies for creating comfortable physical facilities have been agreed by the expert panel based on scales "High Level Agreement" and "Strongly Agree" (IQR = 0 and $M = 5$).

"The high level of agreement" and "Strongly Agree" (IQR = 0 and $M = 5$):

The majority of study participants were found to have agreed at high level to approve six strategies as follows to create physical facilities that are made more comfortable and content models of effective schools:

- Awareness exists among the school stakeholders to preserve assets and hygiene in the school;
- School leadership often monitors the level of school facilities for formal and informal use;
- School leadership strives to obtain support from outside to increase the number and quality of school facilities
- Members of the school feel comfortable in the school as it has a high level of cleanliness;
- School facilities and equipment are adequate and functioning; and
- School budget is allocated for developing students' achievement more than the allocation for school decoration.

Concentration on the Process of Teaching and Learning

Teacher Leadership: The majority of study participants were found to have been agreed at a high level on fourteen strategies to produce teacher-based leadership on the scales "High Level Agreement" and "Strongly Agree" (IQR = 0 and $M = 5$) and "High Level Agreement" and "Strongly Agree" (IQR = 1 and $M = 5$).

"The high level of agreement" and "Strongly Agree" (IQR = 0 and $M = 5$):

The majority of study participants were found to have achieved high level agreement on approving 13 strategies as follows to produce more teachers and leadership style to make it an effective school model of content, namely:

- Staff development programs help teachers improve professionalism;
- Teachers guide counterparts to share knowledge and skills;

- Master teachers are teaching content;
 - Teachers are given a fair recognition based on current achievements;
 - Teacher believes that teaching career is a noble profession;
 - Teachers form a team of quantity to contribute their knowledge and skills to people in and outside school;
 - Teachers become role models to other colleagues;
 - Teachers identify the knowledge and skills required by teachers under their control;
 - School leadership has confidence in the ability of school teachers to perform tasks;
 - Teachers implement reflection for the purpose of improvement in teaching and learning;
 - Teachers use the maximum time to teach;
 - Teachers have a friendly relationship with students; and
 - Teacher expertise is leadership that is capable of influencing peers, particularly new teachers and teachers with problems.
- Teachers strive to improve knowledge and skills along with the changing environment themselves;
 - School leadership evaluate teaching performance based on the standard benchmark;
 - Teachers diversify teaching methods to attract students;
 - Teachers have data and information related to students' achievement levels;
 - Teachers teach based on the syllabus of the Ministry of Education;
 - Teachers teach content based on the expertise of their teaching;
 - Most of the time, in T and L, teachers actively involve students;
 - School stressed the importance of professional development of staff;
 - School leadership school also put experienced teachers to teach pupils in the early stage schooling; and
 - Teachers relate teaching to students' daily experience.

"The high level of agreement" and "Strongly Agree" (IQR = 1 and $M = 5$):

The rest, as a strategy as follows to produce teacher leadership style has been agreed at high level to be highly approved in the content model:

- Teachers are able to perform a study on related problems.

Curriculum: The majority of study participants were found to have agreed at a high level on 11 strategies for implementing the teaching and learning (T and L) process through curriculum-based scales "High Level Agreement" and "Strongly Agree" (IQR = 0 and $M = 5$).

"The high level of agreement" and "Strongly Agree" (IQR = 0 and $M = 5$):

The majority of study participants were found to have been agreed at high level to approve eleven strategies as follows to implement the process T and L through the curriculum and more effective strategies for inclusion in the model of effective schools:

- Teachers' teaching methods emphasize students' level of knowledge and skills;

High Expectations

Holistic Expectations: The majority of study participants were found to have agreed at a high level on seven strategies for creating expectations based on continuous scales "High Level Agreement" and "Strongly Agree" (IQR = 0 and $M = 5$).

"The high level of agreement" and "Strongly Agree" (IQR = 0 and $M = 5$):

A high level of agreement to approve the following six strategies to create continuous practice expectations has been reached among the majority of study participants to become further strategies in the model of effective schools:

- Teachers should identify students' strengths and weaknesses;
- School leadership often remind teachers to treat students as those who have feelings;
- Teachers allocate additional time to guide students;
- Schools have data and information related to student background;
- Citizen believes that the school needs the help of God in influencing school planning; and
- The school expects the presence of parents and guardians.

Process Toward Hope High: The majority of study participants found to have achieved high level agreement on five strategies to implement several process variables to the practice of high expectations based on scales "High Level Agreement" and "Strongly Agree" (IQR = 0 and $M = 5$).

"The high level of agreement" and "Strongly Agree" (IQR = 0 and $M = 5$):

A high level of agreement was reached to accept the five strategies as follows to implement the process towards the practice of high expectations among the majority of study participants for use as strategies in the model of effective schools:

- Teachers are confident that every student has the opportunity to learn and succeed;
- At the beginning of the school term the school told students and parents about the school vision and mission;
- Skilled teachers also influenced students;
- Teachers have a clear vision to guide students; and
- Expectations of teachers are not easily influenced by the attitudes of pupils.

Creating an Atmosphere That Challenges Students' Minds: A high level of agreement has been reached on four strategies for creating an atmosphere of challenging the minds of students based on scales. "The high level of agreement" and "Strongly Agree" (IQR = 0 and $M = 5$).

"The high level of agreement" and "Strongly Agree" (IQR = 0 and $M = 5$):

The majority of study participants were found to have agreed at high level to approve the four strategies as follows to create an atmosphere of challenging the minds of students and make them further strategies in the model of effective schools:

- Extra-curricular activities and school students meet the requirements of current interest;
- Teachers continuously assess students' achievement;
- Teachers give students assignments and adequate time to complete them; and
- Teaching and learning methods emphasize increasing students' skills such as thinking skills.

Continuous Assessment

Evaluation on Student Achievement: The five strategies to implement effective methods for assessing students' achievement has been agreed among the majority of study participants at a high level of agreement based on the scales "High Level Agreement" and "Strongly Agree" (IQR = 0 and $M = 5$).

"The high level of agreement" and "Strongly Agree" (IQR = 0 and $M = 5$):

The majority of study participants were found to have been agreed at high level to approve the five strategies as follows to implement effective methods for assessing student achievement and make them strategies in the model of effective schools:

- Teachers use data and information on student academic achievement to implement improvements, particularly on teaching and learning;
- Teachers implement a variety of methods to assess students' achievement;
- Teacher informs parents about the progress of students;
- Teachers assess students as a whole that involves cognitive, affective and psychomotor aspects; and
- Evaluation in the form of test is implemented continuously.

Evaluation on School Achievement: All eight strategies to implement effective methods for assessing school achievement have been agreed among the panel of experts at a high level of agreement based on the scales "High Level Agreement" and "Strongly Agree" (IQR = 0 and $M = 5$).

"The high level of agreement" and "Strongly Agree" (IQR = 0 and $M = 5$):

The majority of study participants were found to have been agreed at high level to approve the eight strategies as follows to implement effective methods for assessing the achievement of schools and further, the proposed strategies are to be included in the model of Malaysian effective schools:

- Staff to be open to receive all views;
- School leadership will explain school policy assessment activities;

- Assessment activities are undertaken toward the overall goal of school effectiveness;
- Schools have a standard instrument rating;
- Staff evaluated by the school leadership;
- School leadership will implement various assessment methods to gather data and information on students' achievement;
- School leadership to evaluate the overall achievement of teachers; and
- Teaching students the opportunity to evaluate teachers.

Environment Rich in Data and Information: The majority of study participants agreed at a high level on all five strategies for creating an environment that is rich in data and information based on the scales "High Level Agreement" and "Strongly Agree" (IQR = 0 and $M = 5$).

"The high level of agreement" and "Strongly Agree" (IQR = 0 and $M = 5$):

The five strategies as related to the following method to produce an environment that is rich in data and information have been agreed at high level as strategies for inclusion in the model for effective schools of Malaysia:

- Special committees are formed to manage data and information in the schools;
- School data and information will be stored using the appropriate technology relevant to the school;
- Data and information of schools need to be constantly updated and easily recoverable;
- School strives to gather data and information on the following: school management, academic management, management of extra-curricular activities and student affairs management; and
- School data and information stored will be used as a basis and reference for school planning and decision making.

Collaboration Between the Home and School

Relationship with Parents: The majority of study participants were found to have agreed at a high level with all nine strategies to create strong relationships between parents with school-based scales "High Level Agreement" and "Strongly Agree" (IQR = 0 and $M = 5$).

"The high level of agreement" and "Strongly Agree" (IQR = 0 and $M = 5$):

All nine strategies such as the following to create consensus between parents and schools have achieved high level of agreement by the majority of study participants who agreed that these strategies be implemented as part of the effective school model for Malaysia, namely:

- Schools conduct meetings with parents to discuss student achievement such as self-discipline and academic progress;
- School strives to provide the best service to students so that their parents are satisfied and thus cooperate with the school;
- School is concerned with opinion and criticism of parents;
- Schools encourage parents to contribute more in the form of energy and ideas rather than finances;
- Staff maintains a good relationship with the students to attract the involvement of parents in school activities;
- School describes the vision and mission to parents;
- School operates a formal ceremony for the community to encourage parental involvement;
- Formation of the PTA Committee should be among the influential and capable individuals to perform activities; and
- Schools distribute written news to parents.

Relationship with Community: A high level of agreement has been reached among the majority of study participants on the four strategies for creating collaboration between communities with the scales "The high level of agreement" and "Strongly Agree" (IQR = 0 and $M = 5$).

"The high level of agreement" and "Strongly Agree" (IQR = 0 and $M = 5$):

The four strategies as follows to create strong relationships between communities and schools have received a high level of agreement from the majority of study participants who recommended these strategies to be part of the effective school model of Malaysia:

- Member schools are trained to provide social services;

- School strives to get contributions from outside parties such as public universities, elected representatives and related ministries;
- Alumni associations are helping schools to achieve the vision and mission; and
- Schools allow community use of school facilities.

Schools as a Learning Organization: The majority of study participants were found to have agreed at a high level of agreement on all twelve strategies to create schools as learning organizations based on the scales "High Level Agreement" and "Strongly Agree" (IQR = 0 and M = 5) and "Level Agreement High" and "Strongly Agree" (IQR = 1 and M = 5).

"The high level of agreement" and "Strongly Agree" (IQR = 0 and M = 5):

Eleven strategies as related to the following method for creating schools as learning organizations agreed at a high level of agreement by the majority of study participants are agreeing to these strategies to be effective content model of school:

- Intensified role of resource center to increase knowledge and improve skills of staff;
- Planned staff development program based on the needs of teachers;
- Teaching and learning problems made the main agenda of each meeting and shared;
- Teachers always share knowledge and experience when conducting an activity;
- School members always exhibit attitude of wanting to learn;
- Teachers attending courses are required to conduct internal courses;
- Principal dialogue is to share professional knowledge and skills;
- Principals always support teachers to pursue education to a higher level;
- Professional discussions with teachers about their daily tasks constantly occur;
- Schools provide access to information widely and effectively; and
- School members implement well every school program organized by MOE / JPN / PPD.

"The high level of agreement" and "Strongly Agree" (IQR = 1 and M = 5):

Only one of the following strategies as related to the method for creating schools as learning organizations received a high level of agreement by the majority of study participants as to the strategy used for the model of effective schools:

- Reading materials placed in each staff room.

Overall, in the fourth round of this Delphi study, study participants have agreed to accept the seven key features of effective schools and one hundred and thirty-eight strategies that are grouped in themes and subthemes respectively to form the Effective School Model for Malaysia.

DISCUSSION AND CONCLUSION

The study was conducted to develop a model based on the context of effective schools in Malaysia that have different problems and development needs compared with factors in the context of other places. Hence, the model built is expected to be able to meet the government's intention to produce human resources that characterized human capital. For example, spiritual factors contributing to the success of a school are less discussed by western researchers. However, in this study the majority of study participants have agreed to agree that these factors also influence the success of a school. SaedahSiraj (1998) agreed with the findings of the opinion that a workplace environment that covered spiritual (divine) climate, compromise and cooperation among staff also contributed to the success of a school [21].

Furthermore, the findings of this study also showed that the majority of study participants have agreed to agree that leadership is a principal prime mover in creating effective schools. Marzano (2003) held that the principal's professional leadership is needed by the effective schools because they are able to change the schools, teachers and students towards the positive [22]. Hence, past studies [1,] such as [1, 23, 24] also find the contribution of school leaders is essential in creating effective schools [5].

However, without the contribution of other factors, especially teachers, principals' leadership will not be able to realize the vision and mission that has been set for creating effective schools; as Harris (2000), [5] says, the success of a school is highly dependent on the ability of teachers in implementing changes in the classroom. Study participants achieved consensus on the other contributory factors namely shaping the school as a

learning organization is important as part of the effective school model because principal and teacher professionalism can be enhanced by creating a learning society with the following characteristics: continuous staff development; school members share knowledge and always want to learn.

The implication is that the effectiveness of the principal and teachers in carrying out their responsibilities can lead to effective schools [22] through successful implementation of the following factors: creating a conducive environment; focus on teaching and learning process; school having high expectations of the students; continuous assessment and evaluation of students; and good collaboration between the school and home.

Hence, contributing factors have been agreed by the majority of study participants to be the effective schools model. Overall, the findings of this study can be expected to guide stakeholders in education in particular schools to create an effective school as [25] study says the findings obtained from an individual opinion or a group of individuals called specialists who are able to tackle a problem that has been identified are important because they have the skills to look forward.

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