Areas of School Improvement: Consensus of Various Educational Stakeholders

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Abstract
This study was conducted to find the consensus about areas of school improvement (SI) from the perspectives of 21 key educational stakeholders consisted of education policymakers, theoretical experts, community leaders and parents. The study mainly adopted a quantitative approach through e-Delphi study by the use of surveys and questionnaires. Three rounds of e-Delphi study were conducted to identify areas of SI involving 21 panellist of experts. The tool used to collect data during e-Delphi was a four-point Likert scale (1=Strongly Agree, 2=Agree, 3=Disagree, 4= Strongly Disagree). This study considered 90% of the percentage agreement among the experts as the value to define consensus. Questionnaires were developed based on the experts' suggestions as an instrument for a survey to four strata of respondents; lecturers at MOE, chairmen of PTA, officers at District Education Office and headmasters. A three-point Likert scale (Excellent, Moderate and Need Improvement) was used for this survey. The findings revealed nine areas of SI as agreed by the experts which were; Leadership and Management, Teacher Professional Development, School Culture, Student Learning Outcome, Instruction, Community Involvement, ICT in education, Curriculum and Support for Learning. The results of the study showed that there were eight items across six areas of SI that needed to be improved; Teachers' welfare, Leadership innovation, Pre-training before appointment of school leaders, Races unity, Student's learning potential, ICT literacy among school leaders, ICT literacy among teachers and Unity/National integration. It is expected that the findings of this study would offer valuable implications for researchers, policy makers and practitioners.
Keyword: Delphi Study, Educational Stakeholders, Leadership, School Improvement, Survey

Introduction
There is wealth of documented experiences from various countries regarding school improvement (SI) studies. Unfortunately, Malaysia suffers not only from the absence of inquiry and knowledge about SI experiences but also the lack of documented resources on the priority areas of SI. The Malaysian Ministry of Education (MOE) as a guardian of the

education system in the country has spent a great number of resources on education development. Thus, research on SI produces significant information of cumulative learning about how to improve the quality of educational system according to its needs and dimensions. The empirical study of SI in Malaysia increases the possibility that relevant people such as scholars as well as the public who need access to this knowledge, take into account contextual realities and adaptations of knowledge about what's work and what's not in local efforts to implement changes. SI is the process of conscious efforts by which schools become more effective both in terms of academic outcomes as well as social and cultural development of the pupils and adults within the group.

Background of the Study

Since independence in 1957, the Malaysian education system has experienced tremendous development to accommodate national hopes and aspirations as well as global demands. Malaysia has focused considerable effort on developing and improving its national education system (Ministry of Education Malaysia, 2013) which is the nucleus of the country's growth and development. This situation is clearly reflected in a significant financial investment in education, comprehensive educational plans and subsequent policy reforms (UNESCO, 2013). Since the First Malaysian Plan (1966-1970) until the Twelfth Malaysian Plan (2021-2025), various strategic efforts and policies were introduced with the intention to develop a comprehensive national education system focusing on integration among the people in a truly democratic and global standard nation (Idris et al., 2014).

The history of the Malaysian education system began with the diverse and fragmented system evolved into an integrated national system (Ahmad, 2012); Ministry of Education Malaysia, 2013; Hussin, 2009; UNESCO, 2013) that seeks to be responsive to a changing economic and technological landscape and evolving national aspirations (Economic Planning Unit Prime Minister's Department and United Nations Country Team Malaysia, 2011). Currently, many schools have been awarded High Performing Schools with unique characters and consistently producing academic and non-academic achievers (Ministry of Education Malaysia, 2015). There are also some schools that have been accorded special status based on certain criteria such as Trust School, Smart School, Transformation Schools (TS 25), Vision School and Cluster Schools of Excellence; in which can become a motivational factor for others to emulate (Ministry of Education, 2012). The strategy is to ensure a greater commitment from the Government and more effective involvement of the community and private sectors to complement the educational transformation journey.

The latest development that reflects a strong Government commitment to improving the quality of education is by making education as one of the National Key Result Areas (NKRA) under the Government Transformation Program (GTP) (Department of Prime Minister, 2015). The strategic approach towards assuring high quality of education plays a vital role in achieving the nation's ambition to produce a well-educated and skilled workforce. Initiatives were planned in addressing almost every aspect of a child's education from pre-school to higher education. The development of the Malaysia Education Blueprint (2013-2025) is intended to guide the education system onto the right track (Ministry of Education Malaysia, 2013).

Previous discussions have shown that despite making remarkable progress, the Malaysian education system is still facing some flaws. School system failure is considered as one of the greatest challenges in many countries (Baars et al., 2014; OECD, 2010; Ravitch, 2010). School failure is understood as the failure of the school system to provide an appropriate level and adequately defined services for all students to be successful. In this definition, school failure includes all failure regarding policy and practice within schools and classrooms including pedagogy, leadership and professional learning (Faubert, 2012). Some people perceive school failure in a more conventional view of failure as an outcome for students when they do not acquire the skills, knowledge or credits expected or required. Some people see school failure when the school is not able to develop a positive learning organization for teachers, staff and the whole community. However, the causal relationship is that the failure of schools or systems results in the failure of students. Thus, the focus for improvement and remedy is to the school or system, rather than to the student.

There is an increasing focus on the development of 21st century learning (Huber, 2004; National Education Association, 2014; OECD, 2012; UNESCO, 2014). The four pillars of learning initiated by UNESCO are also a benchmark for a quality education system (Delors, 1996). Learning to know, learning to be, learning to do and learning to live together are the pillars of 21st century education. As globalization is dominating our life nowadays, competent future citizens with global competencies should be the output of a quality education system. Malaysian Education System is no exception to fit into that inspirations. Parallel to an intensified control of pupils' level of academic achievement, there are increasing demands for schools to gradually improve social and affective outcomes of schools.

The major concerns in addressing the SI include; do the experiences through schooling can prepare students to survive personal and professional lives in a rapidly changing society? What are the main aspects of SI that need to be the focused to ensure the aim for academic and non-academic dimensions are attainable? What is the priority of the SI areas that the authority needs to emphasize to seek ways to improve educational quality? What are the issues and challenges faced by the school professionals to improve school's system? What are the available options recommended for school personnel to guide successful SI efforts?

Schools have many similarities with other organisations that bring people together for a shared goal, such as hospitals, companies and government offices. Today's schools are expected to assume responsibility not only by acquiring academic skills but also for the development of characters, civic virtues, global awareness, cross-cultural skills and artistic talents. These are transversal competencies which are highly important to be developed by the students. The current use of tests and grades raises several concerns. Real measurement of school's success should include non-academic achievement indicators such as social or affective outcomes (Harris & Hopkins, 2000) for examples; school as a safe, attractive and positive environment, a culture of hard work and opportunity, a learning organization for the faculty and a centre of learning within a larger community and students' behaviour, attendance, attitudes and self-esteem. This study will incorporate academic and non-academic achievements as an indicator of a successful school transformation.

Democratic participation of various stakeholders in formulating educational policy, making decision, monitoring and evaluating the SI efforts is essential. The principle of collective

wisdom which educational stakeholders must discuss and argue about the policy before the implementation is an important principle for good public policy (Hussin et al., 2007). The need to consider perspectives from various stakeholders in improving the education system is more prevalent as the educational administration in Malaysia is highly centralized with four hierarchical levels; that is, federal, state, district and the lowest level, school. Major decisions and policy-making take place at the federal level represented by the Ministry of Education and various stakeholders are affected by it.

Participation of all stakeholders in decision making for SI is not fully employed in the current context. Various stakeholders (either within or outside of the system) need to be involved in SI initiatives as they have their high stakes in the education system. Lasting SI will not come from the mindless adoption of someone else's plan or program but must involve thoughtful participation by many people within each school and community (Gold et al., 2004; Sebring et al., 2006). Thus, this study will engage diverse stakeholders to get authentic data and understand their perspectives about SI in Malaysian.

Currently, there are many instruments used to gather information to improve schools. However, the instruments are intended for a specific stakeholder only such as parent survey, teacher survey or student survey (Bryk, 2010; Bryk et al., 2010; Office for Standards in Education, 2015). There is no instrument that can identify areas of concern from various education stakeholders in a survey. Thus, this research will fill the gap by developing questionnaires to find out consensus from various stakeholders regarding the priority of SI areas. The questionnaires were developed by consulting the experts' opinions to enhance the worthiness, validity and reliability of the survey.

This research employs a system perspective, in which the Malaysian education system is understood as a complex organization composed of multiple and interconnected subsystems. Changes affecting any particular subsystems have implications that impact other subsystems, sometimes in unanticipated ways. The external environment can be the inputs to the system. In sum, Systems theories emphasize the unity and integrity of the organization and focus on the interaction between its component parts and with the external environment. This study will explore the perspectives of stakeholders in SI efforts in Malaysia, specifically the Malaysia primary education. Feedbacks of stakeholders will become the inputs for making the policy and strategy for SI at the national, district or school level.

Prior work by Bryk and colleagues (Bryk, 2010; Bryk et al., 2010; Sebring et al., 2006) on the essential elements of SI in Chicago schools has also been adopted to develop the conceptual framework for this study. The framework is appropriate as it is comprehensive by including the internal workings and external conditions for SI. The framework emphasizes on the parents and community members' involvement with educators as decision makers to improve the educational process and raising student achievement. Based on their analysis, they concluded that five organizational supports are crucial for SI. They presented these supports in a framework because the supports do not have the same potential benefit in isolation that they have when they function together. The figure shows the dimensions of the framework.

Apart from the five domains proposed by Bryk (2010), educational technology will also be included in the conceptual framework of this study. Tremendous impacts of technology in all

aspects of life have become thrust for Malaysian schools to include educational technology as an important domain for improving the school system. The potentials of technology in the Malaysian education system have been explored by many previous researchers (Ghavifekr et al., 2013, 2014; Hoque et al., 2012; Wong et al., 2013). The researcher elaborates each domain to fit the context of the Malaysian education system and adapting the theoretical framework of Open System, System Thinking, Organizational Development and Change Theory as discussed earlier.

The Essentials Supports for SI from the work of Bryk and his colleagues was then elaborated into eleven areas of SI in addition to the educational technology perspective to complete the areas of concern for improving schools. These twelve areas become the main ideas of SI areas presented to the educational stakeholders to get their consensus in this study. The table below shows the detailed derivation of areas of SI for this study.

Table 1:
Suggested Domains and Areas of School Improvement

Domain	Overview	Areas of SI
Leadership	School leaders are catalytic agents for systemic improvement. Leaders build urgency for change at community, school and classroom by providing necessary guidance to sustain a coherent program	**1.Leadership and management**
Parent-school-community ties	The strong relationship between school and community. Schools are more hospitable and welcoming environment for the parents and local institutions concern with the children.	**2. Community involvement**
Professional capacity	Enhance the professional capabilities of the newly appointed teachers and their continuous professional development	**3. Teachers' professional development** **4. Quality of teacher**
Student-centered learning climate	Nurture overall normative environment where students feel safe, pressed and supported to engage in meaningful learning	**5. School culture** **6. School facility** **7. Support for learning** **8. Curriculum relevancy**

Instructional guidance	Cultivate the school wide supports concerning curriculum, instruction and assessment in order to promote intended learning outcome	**9. Instructional** **10. Students' assessment** **11. Learning outcome**
ICT in education	Ensure students not only learn how to use ICT but are able to leverage it effectively to enhance their learning. Strengthen the foundation of ICT-enabled schools inclusive with complete facilities and human capability and introduce proven ICT solutions into the education system.	**12. ICT in education**

The main purpose of the study is to examine the expectation of stakeholders towards SI in the context of Malaysia. Specifically, the study attempt to accomplish the following objectives:

- To analyze and identify consensus regarding the areas of SI in Malaysia based on educational stakeholders' perspectives.
- To find out the rankings of the important areas for SI suggested by educational stakeholders
- To find out the perspective of educational stakeholders about the areas of SI that needs to be enhanced in Malaysian primary education.

This study attempts to address the following research questions:

- What are the areas of SI suggested by educational stakeholders?
- What are the rankings of the important areas for SI suggested by educational stakeholders?
- What are the areas of SI that needs to be enhanced in Malaysian primary education.

Literature Review
This section examines literature mainly on SI and other selected areas of SI relevant to this research. These include some international and national research findings and statements regarding the areas of SI.

The Context of Educational Reform in Malaysian
The main agenda for educational reform is to prepare Malaysian students towards knowledge-based economy rather than industrial-based economy. In accordance to Delors Report by UNESCO (Delors, 1996; Elfert, 2015), a fundamental shift towards creating a more technologically literate and thinking workforce in the educational programs is needed. Furthermore, the education culture must be transformed from the one of memory-based to the one that is informed, thinking, creative and caring environment. The aspiration is to nurture young Malaysians who are knowledgeable, think critically and creatively, have

leadership skills and are able to communicate with the rest of the world. They must be instilled with values, ethics and a sense of nationhood, enabling them to make the right choices for themselves, their families and the country. The focus is no longer on schooling, educational institutions provision but on the lifelong learning process of every individual that would enable the formation of competent citizens for a developed nation.

Another important consideration for educational approach during this era is the utilization of technology in education. In order to cope with the new changes arising from globalization, using new technologies in the education system was one of the ambitious policies for governments worldwide. Hence, in 1997 the Smart School Project was initiated in Malaysia (Ministry of Education, 1997). Policy statements regarding Smart School project incorporated all initiatives regarding ICT usage in education including the effective management of schools and teaching and learning activities based on ICT (Ministry of Education, 2012).

Another shift of strategy in the educational system is the boost on the usage of English language. The idea was initiated by the fourth Prime Minister of Malaysia, Mahathir Mohamad who publicly expressed his grave concern at the poor results of students' attainment in the national English language examinations. Dual Language program (DLP) was introduced in 2016 to give more opportunities for students to enhance their English proficiency (Suliman et al., 2017; Moses & Malani, 2019). DLP provides flexibility to the schools, teachers, students as well as parents to choose their preferred language of instruction, making it very much open to the willingness of the schools to be part of it. DLP allows selected classes such as Science, Technology, Engineering and Mathematics to be taught in English.
Presently, one particular strategy that has been adopted to enhance the quality of education system is the classification of schools that has been accorded special status based on certain criteria. The special status of school will be a motivational factor for other schools in the same category to emulate. Some of the status are; High Performance School, Cluster School, Smart School, Vision School, Trust School or Transformation School.

Areas of School Improvement
The history of SI started as a focus to develop professional capacity of teachers. At the beginning, SI was seen as an approach that was used to develop teachers' characteristics, attitudes and behavior in promoting effective pupil's learning. In other words, the studies used the teacher's effectiveness as an instrument for teacher improvement and development (Harris, 2000). Later, SI research moved to the classroom and school level because it was recognized that change and improvement should be focused not only on the teacher, but also on the classroom and school as part of the educational ecosystem.

The existing research literature distinguishes five main phases of SI. According to Hopkins and his colleagues, a review of the last two and a half decades of SI suggests that the field has evolved in a number of distinctive phases as practitioners and researchers have gained expertise in implementing and studying educational change (Hopkins et al., 2014, 2011).

Although previous empirical studies on SI have, collectively, provided useful explanations on the effects of different areas of school contexts on the quality of school system, however, these effects tend to be discussed in isolation. It is highly contingent upon the variables and

research design perceived by researchers as essential in establishing the significance of particular aspects of school contexts in improving students' educational outcomes.

Most commonly researched contexts include human resource capacity such as school leadership and teacher (Bubb & Earley, 2009; Hallinger & Heck, 2010a, 2010b; Lieberman & Pointer Mace, 2008; Mincu, 2015; OECD, 2012; Penlington et al., 2008; Salfi, 2011; Seashore, 2009; Shakir et al., 2011; Stegall, 2008; Stoll, 2009; Stringer, 2009; Townsend, 2011; Wiseman, 2012) adoption and implementation of changes in curriculum and instruction (Johnson, 2013), involvement of community in schools (Australian Council for Educational Research, 2013; Epstein et al., 2002; Hanushek & Rivkin, 2012; Prew, 2009) organizational culture (Kisumo et al., 2013; Schoen & Teddlie, 2008) and adoption of technology in school system (Chapman & Mählck, 2004; Hepp et al., 2004; Tosun & Baris, 2011; UNESCO, 2011). These studies lack an adequately conceptualized analytical framework which encompasses comprehensive aspects of schools' internal and external contextual condition.

Based on SI literature, there is an established body of findings from studies conducted in many contexts. A report by the international consulting firm McKinsey and Co. (Mourshed et al., 2010) identifies characteristics of school systems around the world that have demonstrated consistent improvement. One trait that all of the systems studied have in common is that teachers share and work on their practice together by becoming learners of their own teaching. According to Barber & Mourshed (2007), there are three factors behind world-class school systems, "getting more talented people to become teachers, developing these teachers into better instructors, and ensuring that these instructors deliver consistently for every child in the system".

Similarly, (Fullan, 2011) identifies collective capacity built through planned collaboration as the hidden aspect that many school systems have neglected to cultivate. The Stanford Social Innovation Review (Leana, 2011) claimed the highly focus on the skilled individual teacher generates undervaluing the benefits that come from teacher collaborations that strengthen skills, competence and a school's overall social capital. She asserts that there is a missing link in school reforms whereby current focus on building teacher human capital which is often associated with paper credential will not yield qualified teaching staffs. Instead, the more important thing is the practices of collaboration and information sharing among teachers are greatly needed for SI.
As suggested in the Education Improvement Commision (2000), student performance improves when teachers use curriculum-delivery strategies which specifically address the needs of their students, when the school environment is positive, and when parents are involved in their children's education. In planning improvements, therefore, schools should establish one priority in each of these three areas which are curriculum delivery, school environment, and parental involvement.

According to Yiasemis, there are several significant themes, currently under active investigation including school structure and management, classroom organization, school leadership, teacher training and staff development, curriculum and assessment, community involvement, lifelong learning and special provision for students with special educational needs (Yiasemis, 2008). Similarly, Stoll also claims that a large body of SI literature highlights generic features such as: a focus on teaching and learning; using data to help guide

improvement efforts; high quality professional development, embedded within professional learning communities; leadership and community involvement; and external support (Stoll, 2009).

Townsend in his article suggested that if we are concerned about improving students to learn in school, then there are three major areas of improvement for educators to think about. The first is having an appropriate curriculum for a rapidly changing world, the second is the pedagogy we use to engage every student in this curriculum and to enable them to build a positive relationship to learning so that they can become a lifelong learner, and the third is the way in which we assess the level of success (Townsend, 2009).

One of the largest empirical studies to demonstrate the impact of school conditions and SI was the massive seven-year study conducted by the Consortium on Chicago School Research. It was summarized in the 2010 book Organizing Schools for Improvement: Lessons from Chicago. The framework of essential supports for SI stemmed from the project is utilized in this study. Hence, the five essential supports together with an additional area of Information Communication and Technology (ICT) aspect collectively will be the main framework for this study (Bryk, 2010; Bryk et al., 2010; Chapman & Mählck, 2004; Ghavifekr et al., 2013, 2014; Hoque et al., 2012; Wong et al., 2013; Sebring et al., 2006; Cheng, 2001).

Educational Stakeholders
Educational stakeholders can be classified into internal and external. Internal stakeholders are those who work within the school system on a daily basis and who largely control what goes on there (Paine & McCann, 2009). They include school staff, district staff, officers from state department and to some extent parents. External stakeholders are those outside the day-to-day work of the schools who have a strong interest in school outcomes, but who do not directly determine what goes into producing those outcomes (Paine & McCann, 2009). They are business communities, taxpayers, university lecturers, independent international organizations and members of non-profit organizations. Perspectives of both internal and external stakeholders should be taken into consideration when making SI policy.

Methodology
This section discusses the methodology used in the study. In order to fulfil the research objectives, a systematic research methodology is required to ensure good research findings. This chapter consists of research design, developing research instrument, identification of population and sample, procedures for data collection and also the procedures for analysis of the collected data.

Research Design
Many educational studies often used questionnaires involving teachers, pupils and parents because getting information from them is important (Radzi et al., 2010; Goh et al., 2012), as they can often provide an overview about schooling. But, it is not a common practice in Malaysia to include various stakeholders in research. However, this research is significant as it expands the stakeholders' perspectives into wider prospects. Stakeholders outside the school system such as education officers at the state and district level, education NGOs, education lecturers, the business community and community leaders were also involved. These groups of stakeholders have somewhat different perspectives on school and education as a whole. Their voices should also be considered in making effective policy planning for SI.

In order to achieve the objectives, this study was conducted in two phases. The first phase is the instrument development phase. The Delphi Study was used in the development of the questionnaires. A panel of experts about school development was consulted to verify the domains and items of the questionnaires. The questionnaires were used to identify the priority areas of SI from the perspective of educational stakeholders.

After the development of the instruments for the study, then it proceeded to the second phase which involved the survey. The survey was intended for the selected sample of various educational stakeholders. The samples were representatives from school leaders, DEOs, parents and academicians. They were considered knowledgeable in the SI field due to their involvement in the school system ranging from leading the schools on daily basis, affected by the quality of the students from the system or interested to improve the school system. With these merits, they could provide valid perspectives about SI.

The data for this research was collected from identified stakeholders across the state of Pahang in Malaysia. It was done in phases according to the prescribed processes and steps to ensure data collection and data analysis were done properly and accordingly. This study utilized a questionnaire, survey and limited online focus group discussion. All the questionnaires and the subsequent survey questions broadcasted to the intended respondents online, making maximum use of available electronic mechanisms accessible by both parties, researcher and respondent. Raw data were analyzed in two ways separately and successively. The first analysis involved the use of three rounds of e-Delphi study analysis and followed by the structural equation modelling analysis (SEM) measurement model and structural model.

Instrumentation

This study mainly used a web-based questionnaire as a tool to collect data needed to answer the research questions. For the Delphi study, the questionnaire was developed to ask the agreement among the experts about seven areas of SI and corresponding items under each area. The questionnaires were shared through electronic means which were emails and social media applications. Subsequently, the outcomes from the analysis of the e-Delphi study were used to develop questionnaires for the survey.

The Delphi study round 1 began as experts were provided with the Delphi Experts Invitation Letter, The Study Overview, Study Participation Agreement and Round 1 Instruction and Questionnaire. These documents were vital when conducting the Delphi study because panels of experts must be informed and motivated about participating in all rounds and returning their completed questionnaires in a timely manner so that the analysis can be conducted. Thus, the researcher as the facilitator would prepare the feedback report for the successive rounds.

In the first phase, the experts were required to respond to the twelve listed areas of SI and sixty-three (63) series of statements about the areas by indicating whether he or she strongly agree (SA), agree (A), disagree (D) or strongly disagree (SD). They were asked about their degree of agreement to use the indicators in the questionnaires to be used for a survey to the educational stakeholders. Experts were also asked to contribute further ideas or comments in relation to these topics in a free-text response space available within each of the statements, providing the opportunity to elaborate or explain responses. Their comments and

ideas were incorporated as improvements for the questionnaires to be used in the next round of the Delphi study.

For the second phase, questionnaires were developed based on the output of the Delphi study. The questionnaires for the survey were divided into 3 sections: Section A: Demographic, Section B: Perspective of Respondents and Section C: Ranking Order. Closed questions was structured for the answers by allowing only answers which fit into categories that have been established in advance by the researcher. In this study, the researcher instructed the respondent to answer by selecting from a range of three options supplied on the questionnaire. The options were; Excellent, Moderate or Need improvement. The main advantage was that the structure imposed on the respondents' answers provides the researcher with information that is of uniform length and in a form that lends itself nicely to being quantified and compared. The answers provide pre-coded data that can be easily analysed. The advantage was less scope for respondents to supply answers which reflect the exact facts or true feelings on a topic if the facts or opinions happen to be complicated or do not exactly fit into the range of options supplied in the questionnaire. The closed-ended question with three choices of answer was enough to help the researcher answered the research questions.

Population and Sampling
Educational stakeholders were the main respondents as the experts in the Delphi study and respondents of the survey. For the Delphi study, 21 experts comprised of individuals with knowledge about the SI, had the motivation to engage with the inquiry process and were able to articulate judgments. Their expertise was based on their roles in the MOE, theoretical experts from local universities, advocates for the quality of education system such as community leaders, NGO leaders and guardians of the students.

For the survey, the respondents were from educational stakeholders including lecturers at MOE, Officers from DEO, Chairmen of PTA that represented the guardians of the students and headmasters.

Data Collection Procedures
For this study, in the first round of the e-Delphi cycle the experts were presented with twelve areas of SI and 63 items of SI derived from the extensive review of the literatures. To initiate the Delphi process, the researcher administered a structured questionnaire based on the literature and used it as a platform for questionnaire development in subsequent iterations. The experts were given the opportunity to make professional amendments regarding the proposed areas for SI and items to be posed as a survey to a larger sample. During this round, experts were given the opportunity to express their ideas in the free text-response spaces available.

Next, Delphi experts received a second round of questionnaires and were asked to review the data developed from the responses of all invited experts in the first round and subsequently summarized by the researcher. The researcher also provided Delphi experts with their earlier responses to compare with the new data that had been summarized and edited. Experts were then asked to re-rate the new statements and the free text-response space was not available in this round.

In the third round, Delphi experts received a third questionnaire that consists of the statements and ratings summarized by the researcher after the preceding rounds. Experts were asked to rank their judgments. This round provided experts an opportunity to confirm their judgement from previous rounds and ended the communication process.

Data Analysis
The Delphi study was utilized to answer Research Question 1 and Research Question 2. It was an iterative group facilitation technique that obtained group consensus on the opinions of experts. It involved a series of structured questionnaires completed anonymously by experts where responses were summarized and gave feedback for subsequent rounds of iteration.

Next, in the second phase of the study, a survey was conducted to the educational stakeholders by utilizing the outcomes of the Delphi study. This phase was designed to answer Research Question 3 as the researcher wanted to get an opinion from a larger group of respondents. In the end, the researcher acquired an understanding of SI by identifying the areas, priority areas and areas that needed to be improved.

Descriptive statistics were used to describe expert's demographic characteristics and group responses to each statement in all three rounds of Delphi study and the survey. The consensus was defined as more than 90% of experts agree with the statement. In other words, a statement was considered to reach consensus when 90% or more of the experts rated it 3 or 4 out of 4-point Likert scale. This level of agreement has been considered appropriate in previous Delphi studies (Maertens et al., 2016). Stability of consensus was considered reached if the responses varies by less than 10% (Duffield, 1993).

Results
This section discusses the findings of the research through the two phases of the study. The first phase of the study was to get the consensus of the experts about the areas of SI and at the same time to develop the survey instruments for educational stakeholders. The second phase was conducting the survey to get the perspective of educational stakeholders based on the questionnaires suggested by the experts.

Delphi Study
In the Delphi study, 21 panel of experts were involved. Each of the experts was given a unique code E01 to E21. All of them managed to complete all the three rounds of the Delphi study. In the first round, the experts needed to complete the Study Participation Agreement and understand The Study Overview attached to the questionnaires. Round 2 was designed to narrow the focus of the research topics to facilitate the formation of the group agreement on the research questions. The final round of Delphi study helped the researcher to conclude areas of SI and to determine its ranking or priority. The experts were educational stakeholders from various backgrounds as the heterogeneity was considered essential to decide about areas of SI in Malaysian. Some of them were affiliated with government agencies, private companies, independent companies and non-governmental organizations. The Category of the educational stakeholders was based on their engagement in the educational system such as Policymaker, Community, Researcher and Parents. Officers at the MOE were the individuals who were highly engaged in making policy directions in education.

The Likert scale was established to make the experts decided on the relative importance of the twelve areas of SI agreed from Delphi Round 1 and 2. The rating scale was carefully defined so that there was some reasonable degree of assurance that the individual respondents make compatible distinctions among concepts such as "very important", "important", "slightly important" and "unimportant". This was further helped the respondents to think through their answers in order to remain consistent in choosing the appropriate scales.

Table 3:
Demographic of the Experts of the Delphi Study

No	Code	Organization/Affiliation	Job Designation	Category
1	E 01, E 02, E 03, E 04, E 05, E 06, E 07	Ministry of Education	Senior Lecturer, Deputy Director, Executive Director, Director, Assistant Director	Policymaker
2	E 08, E11, E15, E16	SUHAKAM , Ministry of Communication and Multimedia, Masjid Kg Tunku, Pusat Latihan Tinta Ori,	Secretary, Assistant director, Religious Teacher, Trainer	Community
3	E 09, E 10, E 12, E 14, E 18	Ministry of Communication and Multimedia, Ministry of Agriculture and Agro Based Industry, Dream Chorus Sdn Bhd, Hong Leong Bank Bhd	Engineer, Administration Officer, Project Manager, Senior Executive	Parents
4	E 13, E 17, E 19, E 20, E 21	Ministry of Higher Education, Private College	Senior Lecturer, Senior Research Fellow	Researcher

After three rounds of Delphi study, the expert group's collective responses on consensus about the important areas of school improvement was identified. They agreed on nine areas of SI and 43 items. They ranked the nine areas and concluded the ranking in this order; 1) Leadership and Management, 2) Teacher Professional Development, 3) School Culture, 4) Student Learning Outcome 5) Instructional, 6) Support for Learning, 7) Curriculum, 8) Community Involvement and 9) ICT in Education. Hence, the researcher could answer

research questions 1; What are the important areas of SI? And research question 2; What is the ranking of SI areas?

Table 4
Important Ares of SI in the Ranking Order

Areas of School Improvement	Mean	Standard Deviation	Percentage rating (%)			
			VI	I	SI	U
1 **Leadership and Management**	**1.10**	**0.30**	**90.48**	9.52	0	0
2 **Teacher Professional Development**	**1.29**	**0.46**	**71.43**	28.57	0	0
3 **School Culture**	**1.33**	**0.48**	**66.67**	33.33	0	0
4 **Student Learning Outcome**	**1.33**	**0.48**	**66.67**	33.33	0	0
5 **Instructional**	**1.33**	**0.48**	**66.67**	33.33	0	0
6 Support for Learning	1.52	0.68	57.14	33.33	9.52	0
7 Curriculum	1.52	0.60	52.38	42.86	4.76	0
8 Community Involvement	1.57	0.56	47.62	47.62	4.76	0
9 ICT in Education	1.67	0.66	42.86	47.62	9.52	0

Note: 1=Very Important (VI), 2=Important (I), 3=Slightly Important (SI), 4=Unimportant (UI)
Bold denotes the ranking of the five most importance area of school improvement

Survey
Table 5 presents the data of educational stakeholders which were the respondents of the survey. They were categorized into 4 strata; Headmasters, Lecturers at MOE, Officers at DEO and PTA Chairmen. The total number of educational stakeholders who responded was 706. Most of the respondents (45.9%) considered that the standard of Malaysian education needs to improve, 27.9% rated as moderate and 26.2% rated as excellent. Thus, it indicates that some areas of SI need to be enhanced to make the education system transformed to achieve the intended objectives.

Table 5
Demographic Characteristics of the Respondents

	Frequency (n)	Percentage (%)
Current Position		
Headmasters	299	**42.4**
Officers at DEO	44	6.3
PTA's chairman	231	18.2
Lecturers	128	32.9
Roles as stakeholder		
High	409	**57.9**
Moderate	249	35.3
Low	39	5.5
Not involve	9	1.3
Performance of the education system		
Excellent	185	26.2
Moderate	197	27.9
Need to improve	324	**45.9**

Note: Bold denotes the highest percentage of choices

Table 6 shows majority of the respondents selected Leadership and Management as the first priority areas of SI (39.09%). On top of that, all the four groups of respondents gave the highest voted for that area; Headmasters (32.78%), Officers at DEO (64.58%), Lecturers (54.69%) and PTA's Chairman (33.33%). Hence, it is strongly supported that educational stakeholders involved in this study had chosen leadership and management as the most important area in educational improvement regardless of the category of stakeholders.

Table 6:
The Frequency and Percentage of the Respondents' Perspective about the First Rank Order for Areas of School Improvement

Areas/ Respondents	Headmasters (N=299)		Officers at DEO (N=48)		Lecturers (N=128)		PTA's Chairman (N=231)		Total (N=706)	
	n	%	n	%	n	%	n	%	n	%
School Culture	57	19.06	10	20.83	11	8.59	46	19.91	124	17.56
Leadership and Management	**98**	**32.78**	**31**	**64.58**	**70**	**54.69**	**77**	**33.33**	**276**	**39.09**
Curriculum	59	19.73	1	2.08	16	12.50	33	14.29	109	15.44
Teacher Professional Development	52	17.39	5	10.42	17	13.28	22	9.52	96	13.60
Instructional	5	1.67	0	0.00	7	5.47	3	1.30	15	2.12
Support for Learning	20	6.69	1	2.08	6	4.69	22	9.52	49	6.94
ICT in Education	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Community Involvement	4	1.34	0	0.00	0	0.00	12	5.19	16	2.27
Student Learning Outcome	4	1.34	0	0.00	1	0.78	16	6.93	21	2.97

Table 7 shows educational stakeholders answered to the survey which was asked to them about their perspective regarding 43 indicators across 9 school improvement areas. It can be seen that majority of the educational stakeholders surveyed consider that six (6) areas of school improvement are in the position of "need to improve". The areas are; School Culture, Leadership and management, Curriculum, Support for Learning, ICT in Education and Student Learning Outcome). As already indicated in the preceding chapter, data was interpreted in a descriptive form to find out what are the areas of school improvement that need to be enhanced as suggested by educational stakeholders. There are eight (8) aspects under six (6) areas of school improvement that need urgent attention that could be identified from the survey findings. Table below exhibits the areas and aspects that the respondents think need to improve in the Malaysian educational system.

Table 7:
Areas and Aspects that Need to Improve in Malaysian Educational System

Areas	Aspects
School Culture	Teachers' welfare
Leadership and Management	Leadership innovation
	Pre-training before appointed
Curriculum	Focusing on unity among races
Support for Student Learning	Every student has a learning potential
ICT in Education	ICT literacy among school leaders
	ICT literacy among teachers
Student Learning Outcome	Unity and national integration

Discussion
According to the findings of this study, school improvement at the systemic level should emphasize on the nine (9) areas which are interrelated and interdependent components of an education system; Leadership and Management, Teacher Professional Development, School Culture, Students' Learning Outcome, Instructional, Support for Learning, Curriculum, Community Involvement and ICT in Education. These are the ingredients considered to be inputs that could drive the improvement efforts. The aim is to prepare an education system that accommodates national hopes and aspirations as well as relevant to the contemporary global demands. As discussed earlier in the literature review, education system is "an open system that is influenced by its surroundings" (French & Bell, 1999). As a result, the Malaysian educational system cannot be treated as a simple unit, but rather as a system that requires ongoing support and maintenance from various educational stakeholders. Systemic interventions aim to improve the educations system should be focusing on various areas of an education system, such as the nine areas of school improvement proposed by the educational stakeholders in this study. Because these areas of the educational system are connected, bringing about and maintaining change in one of the subsystem frequently catalyse changes throughout the rest (French & Bell, 1999).

The education system for each country is unique and there is no exception for Malaysia. Therefore, this study was conducted based on the context by engaging with educational stakeholders in Malaysia. Since the launching of the Malaysian Education Blueprint 2013 – 2025, the nation's education system has increased its' focus on school improvement programs. School improvement research is a method of bringing about organizational change, and it typically involves both pressure and support depending on the situation. As Hopkins (2001) warns, "the emergence of school improvement from the shadows is a mixed blessing". New ideas are expected to emerge in making improvement. School improvement is not working as a single activity. It is considered as powerful set of procedures involving several areas that can considerably improve the quality of the educational system. It won't happen by accident; instead, it will need purposeful effort to construct an optimal learning organization.

Experts engaged in this study rated Leadership and Management as the first ranking for areas of school improvement. Many countries have made school leadership and management as a priority in education policy agenda. This aspect matters in influencing the motivations and capacities of teachers, community, parents, MOE officers as well as establishes the environment and climate in which the school operates. Effective school leadership is essential to improve the efficiency and equity of schooling. References are made throughout the literature review as to how the work of educational leaders is crucial to affect school improvement (Chapman et al., 2016; Dimmock, 2016; Pont, 2020).

Conclusion

The results of this study is that the Malaysian education system is an open system where the involvement of educational stakeholders plays an important and influential role in establishing consensus about the areas of school improvement in Malaysia. Thus, from the study, based on the consensus of the experts' it shows that there are nine areas of school improvement for the Malaysian education system in a ranking order which are; 1) Leadership and Management, 2) Teacher Professional Development, 3) School Culture, 4) Students' Learning Outcome, 5) Instructional, 6) Support for Learning, 7) Curriculum, 8) Community Involvement and 9) ICT in Education. There are eight items across six areas of SI that needed to be improved; Teachers' welfare, Leadership innovation, Pre-training before appointment of school leaders, Races unity, Student's learning potential, ICT literacy among school leaders, ICT literacy among teachers and Unity/National integration.

The research has been able to provide educational stakeholders' perspectives about the areas of primary school improvement in Malaysia. The list of Malaysian primary school improvement areas was identified through a rigorous study involving experts who have a stake in the education system. In addition, the priority areas were identified so that the educational stakeholders, policy makers, training providers are able to make thorough valuation for the benefits of the education system. The significance of this study is the involvement of various educational stakeholders in making decisions about the areas of primary school improvement in Malaysia. Thus, this study may be utilized as a reference for people interested in school improvement research.

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