

The Implementation Lestari School of Malaysia Using Three Pillars of Sustainability Model Dimension

Siti Izzati Zulkifli and AP. Zainudin Hassan

Abstract--- *The various programs related to sustainable school programs have been organized by the government and private sectors in Malaysia, but little research on the programs are being done. In The three pillars of sustainability, namely economic, environmental and social pillars are widely used when discussing sustainability as sustainable development can only be achieved when all three pillars of sustainability are equally represented. It is important to include the three pillars of sustainability when developing a program related to sustainability to be internationally recognized and measurable against the international standard. This paper identifies the presence of three sustainability pillars, namely the economic, social and environmental development of sustainable school programs and existing models. This paper is carried out qualitatively, using semi-structured interviews with teachers actively involved in sustainable school programs. The finding shows that sustainable school programs in Malaysia has three pillars of sustainability, though not equally represented. Based on data analysis using Nvivo software, the comparison made is based on the reference and coverage of the three-pillar of sustainability dimension. It achieves the highest economic dimension in terms of reference and coverage, while the lowest is the social dimension based on school performance. It could be expected the Lestari school is mostly concerned in economic side of sustainability. This study suggests improvement of sustainable school programs in Malaysia is necessary in order for the three pillars of sustainability to be equally represented.*

Keywords--- *Economic Sustainability, Social Sustainability, and Environment Sustainability.*

I. INTRODUCTION

Sustainability has been an increasingly interesting topic among the researchers since the World Commission on Environment and Development [1]. It claims become the best way to practice ‘sustainability’ that meets the current needs without compromising the ability of future generations to meet their own needs [2]. The benefits of sustainability are that it improves economic, environmental and social conditions for present and future generations, and enhances the quality of life by allowing people to live in a healthy environment [3].

The sustainability development started since United Nations Decade of Education for Sustainability Development (2005-2014) followed by United Nations Educational, Scientific and Cultural Organization (UNESCO) Global Action Programme (GAP) on Education for Sustainable Development (ESD). Many nations began to scale up ESD as reported by UNESCO3 since then. The terms of green, sustainability, environment education (EE), education for sustainable education (ESD) and similar terms have been used interchangeably by both scholars and laymen to describe both formal and informal environmental studies [4]. Apart from that, Lestari School was founded in 2001 as it aligns with the first green strategy of NPA, which is education and awareness. This program is a

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product collaboration of several stakeholders at the ministry level. The Lestari School-Environment Award (LSEA) is a two-year program and started its first round of the contest in 2005. There are 7 rounds to date and this program has seen a steady increase in participation among primary and secondary schools over the years. Lestari School program has benefited over 1000 schools since its inception. Then, Lestari Schools has comprised of four (4) aspects; management, curriculum, co-curriculum and green practices, the assessment to measure the sustainability level of the three pillars in all four aspects. According to Zwickle [5] developed the first tool to assess sustainability knowledge of a student population at the undergraduate level that measures students' knowledge on the three pillars of sustainability. As the sustainability concepts increasingly being included in Lestari School program, it is necessary to start measuring progress in this area. The rating scheme of LSEA and updating the Lestari Schools' guidelines to the latest development and expectation of green and sustainable schools also has been reviewed in this paper.

Therefore, this paper suggests the expected sustainable school model in the context of Malaysia. Hence a discussion and review are conducted to identify the types of good programs to be implemented as well as to investigate CSFs for this proposed sustainable school [6-8].

II. BACKGROUND OF THE STUDY

As mentioned earlier, the concept of Lestari School is based on the three pillars of sustainability. It used three interdependent spheres that was originated through the Brundtland Report in which the three spheres are economic, environmental and social. Furthermore, the characterization of this concept lead to create of the three pillars of sustainability namely economy sustainability, social sustainability and environmental sustainability [9]. Figure 1 shows the Overlapping Circle Model [10] and the Three Pillars of Sustainability models to describe the relationship in between the three pillars of sustainability.

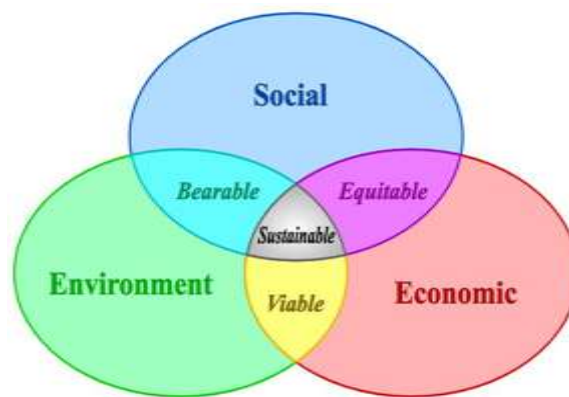


Figure 1: Overlapping Circle Model of Sustainable Aspects

Figure 1 shows the sustainable development can only be achieved when all three pillars of sustainability are addressed and represented. All pillars (Social, Environmental, and Economic) essential to be equally represented as unsustainable of any one pillar is weaker or underrepresented in the system. Moreover, the three pillars of sustainability based on overlapping circle model is shown Figure 2.

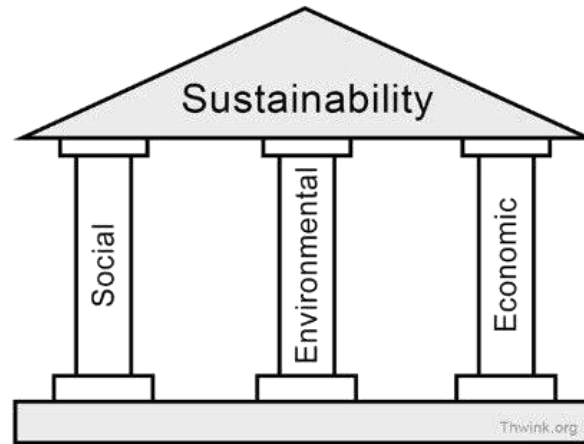


Figure 2: Three pillar of sustainability model

Figure 2 shows the sustainable development can only be achieved when all three pillars of sustainability are addressed and represented. All pillars (Social, Environmental, Economic) need to be equally represented or the system will be regarded as unsustainable if any one pillar is weaker or underrepresented in the system [11]. The three pillars of sustainability models will be used as the main reference model in developing a sustainable school model in this paper.

2.1 Economic Sustainability

Your Economic sustainability is the ability of an economy to support a defined level of economic production indefinitely. Economic value can be created out of every project or decision. A sustainable economy promotes economy activities that are conducted without compromising the stability of the environment and social aspects [12]. In the economic sustainability of Lestari School, one must look at financial benefits that may be gotten from the program, ranging from reduction of operating cost to the generation of money through the program.

2.2 Social Sustainability

Social Sustainability relies on decisions and projects that promote the general improvement of society. Generally, the social aspect of sustainability supports the concept of intergenerational justice, which means that future generations are entitled to the same or greater quality of life as current generations [12]. Social sustainability is equally important as the other two pillars. If it is not taken into serious consideration it can lead to the collapse of the whole process of sustainability as well as the society itself. In of Lestari School, society refers primarily to the school community which also referred to as the main stakeholders of the Lestari School. The school community (or the main stakeholder) is comprised of school managements, teachers, students and parents. A successful Lestari School will manage to include all stakeholders into the practice in which will increase the level of social sustainability [13].

2.3 Environmental Sustainability

The Environmental sustainability is defined as a state in which the demands placed on the environment can be met without compromising its capacity to provide and produce for all people to live well, now and in the future [3].

The main purpose of Environmental Sustainability is to minimize the impact of human activities on the environment and furthermore encourage the restoration and preservation of our natural habitat. Lestari School has been practicing EE and ESD to instil awareness regarding environmental sustainability throughout its program. Every decision that was made must be carefully taught and considered the effects on the environment [14].

There are several models of sustainable schools implemented around the world based on these three pillars of sustainability as shown in Table 1. The first column indicates the name of a sustainable school model followed by a column that states the title of the article referred to either journal or proceeding papers. The third column shows the names of the author and the year the article was published. The fourth column describes the concepts or practices which are the basis of the model being discussed. The last column indicates the inclination of the dimensions emphasized by a particular model.

Table 1: Sustainable School Model

Models	Articles	Authors	Concepts/ Practice	Dimensions
Scherp Model (Sweden)	Whole school approaches to education for sustainable development: a model that links to school improvement	Mogren, Gericke, & Scherp [15]	Scherp's model is designed to measure and facilitate analysis of relationships between a school's organization based on four components namely holistic ideas, routines and structures, professional knowledge and practical pedagogical dimensions	Economic
SEDA Model (Canada)	Guide for Sustainable Schools in Manitoba	Swayze, Buckler & MacDiarmid [16]	SEDA Model identifies four key domains as part of the whole division approach to Education for Sustainable Development e.g. governance, curriculum, teaching and learning, human capacity building and facilities and operations.	Economic
SSAT Model (UK)	Leading sustainable schools	Harris [17]	SSAT Model emphasizes on a school built on the core principles of sustainable development will encourage care for oneself, care for each other and care for the environment.	Environmental
Victoria Sustainable School (Australia)	Sustainable Schools: Renovating Educational Processes	Gough [18]	Victoria sustainable schools program in Victoria, Australia, is concerned with developing learning environments and learning experiences that will enable students to work towards having a good quality of life in a sustainable environment.	Social

The first sustainable school model is Scherp's Model. It is a model that is designed to measure and facilitate analysis of relationships between a school's organization based on four components namely holistic ideas, routines and structures, professional knowledge and practical pedagogical dimensions [15].

Scherp's model is designed to measure and facilitate analysis of relationships between a school's organization

and the quality of its pedagogic work. The model is theoretical and based on four constructs intended to capture fundamental aspects of the organization's everyday practice that are collectively regarded as the driving force of general school improvement is shown in Figure 3.



Figure 3: Interpretation of the Scherp Model

The second sustainable school model is SEDA Model. SEDA model is sustainable develop through Manitoba Education Department's to ensure education in Manitoba supports students experiencing and learning [16]. SEDA Model identifies four key domains as part of the whole division approach to Education for Sustainable Development e.g. governance, curriculum, teaching and learning, human capacity building and facilities and operations is shown in Figure 4.

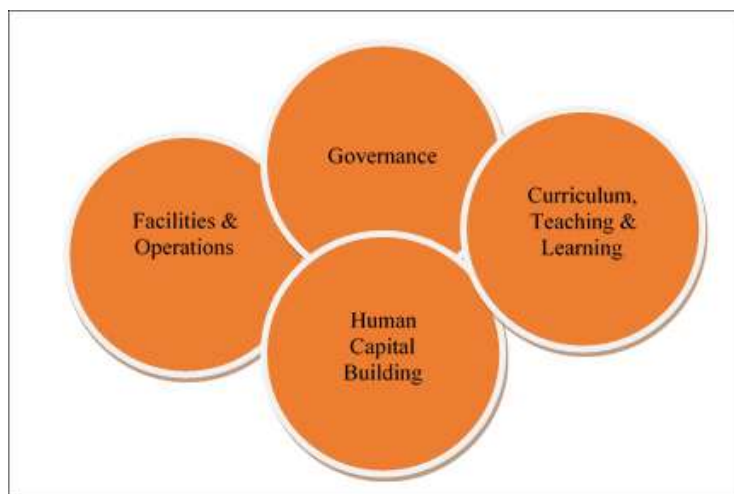


Figure 4: SEDA Model Identifies Four Key Domains

The third sustainable school model is the SSAT Model which this model emphasizes on a school built on the core principles of sustainable development that will encourage care is shown in Figure 5.

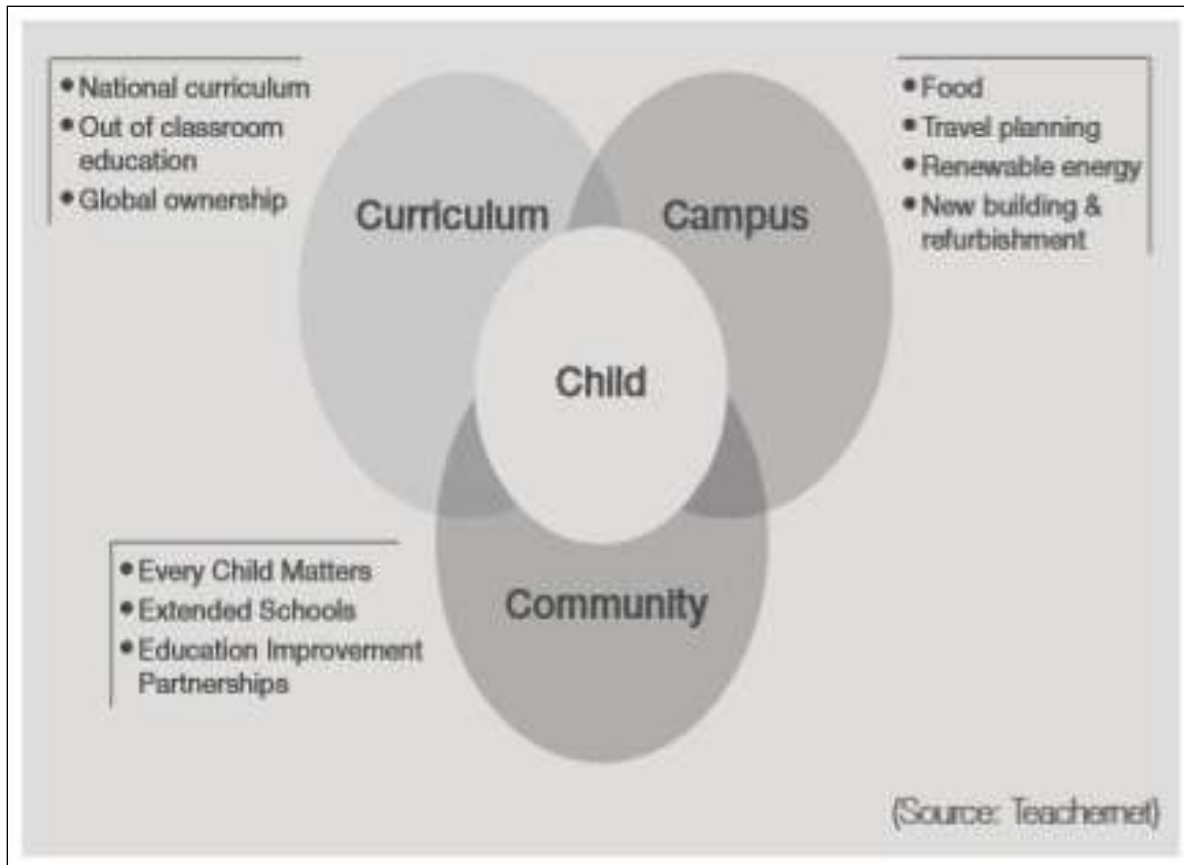


Figure 5: SSAT School Model

School leaders have a central role to play in the implementation of sustainable schools. Unless they set this as the main priority and reinforce this through school development planning processes, it is unlikely to be fully implemented.

Sustainable development needs to be embedded in teaching and learning policies, and school improvement policies, so it is seen as an integral part of the student learning process and a student entitlement. The leadership of sustainable schools needs to harness the leadership capability and potential within the school, community and locality. Diverse leadership forms will need to be embraced to effectively coordinate, plan and sustain developments across the sustainable development agenda [17]. Leadership for sustainability is ultimately distributed and widely shared.

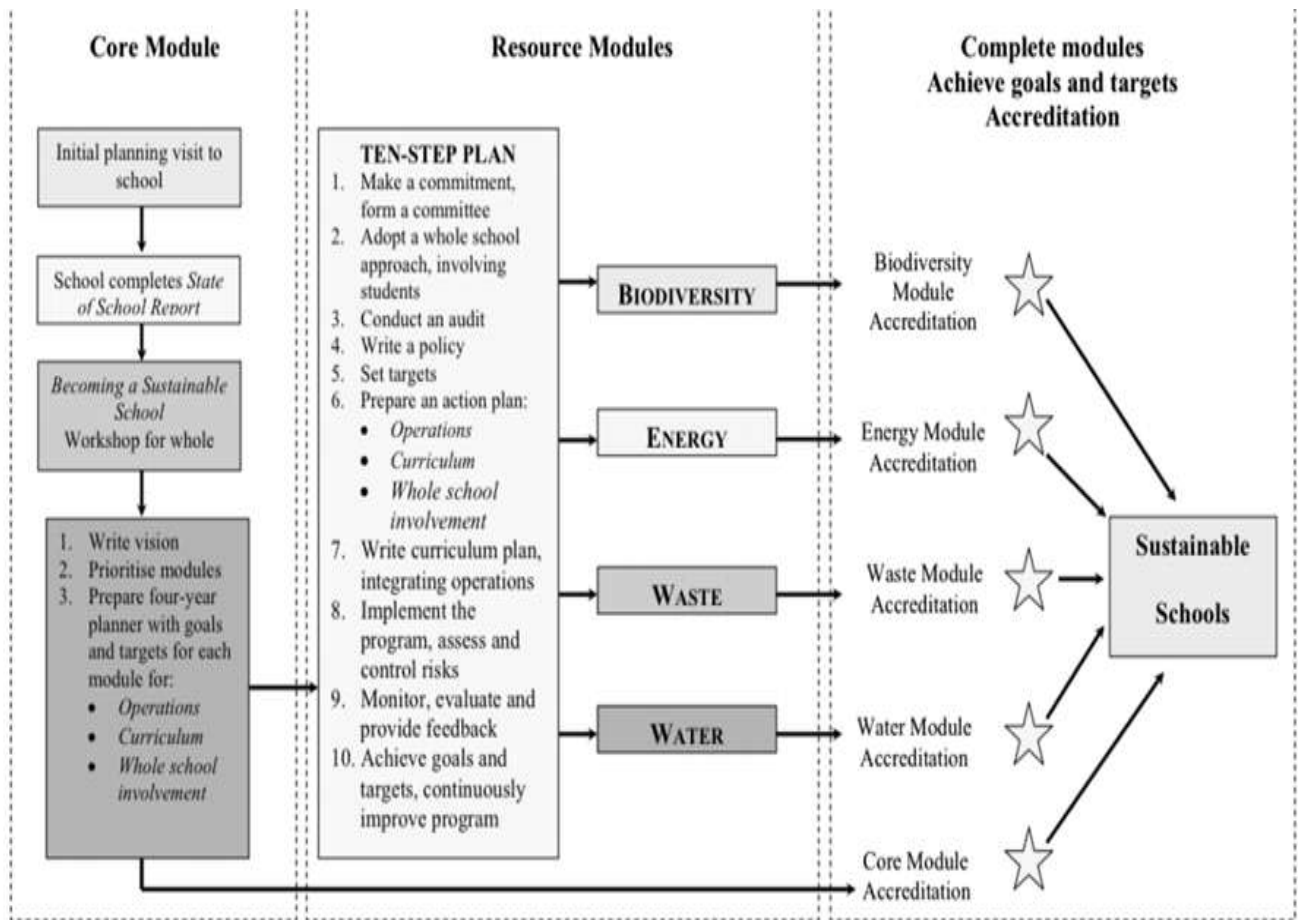


Figure 6: Victoria Sustainable School Model

Moreover, the sustainable development agenda is immediate, real and pressing for many young people. Therefore, there are numerous rich and varied teaching and learning opportunities that arise from this agenda that schools can build upon. The Sustainable Schools program in Victoria, Australia is concerned with developing learning environments and learning experiences that will enable students to work towards having a good quality of life in a sustainable environment (Gough, 2005). Victoria sustainable school model is shown in Figure 6. The experiences of schools in the Sustainable Schools Program provide some guidance on how to develop a quality education that achieves such goals for the development of students. Then, The Sustainable Schools in this evaluation are all also achieving in other aspects of quality learning. All of the schools commented on the benefits to student learning;

- A positive attitude towards learning
- Fundamental skills in literacy, numeracy and self-expression, which will enable them to be successful across all areas of learning
- High level personal, communication and social competencies to work independently and within groups
- Experience in innovation, creativity and problem-solving
- Confidence to deal with technological and cultural change

- Skill sets in the wider community and changing workplace
- Ability to access information and reflect upon

III. METHODOLOGY

The methodology used for this qualitative study are the document analysis of four sustainable school models followed by semi-structured interview conducted with teachers from Lestari school. The document analysis of the sustainable school models is necessary to identify the presence of the three pillars of sustainability, in the concepts/practice of the models. The findings guided the development of the questions for the semi-structured interview. The semi-structured interview was then conducted to the teachers of Lestari schools to identify the presence of the three pillars of sustainability in the practice of Lestari school program itself. The interview was then transcribed and data analysis was conducted using NVIVO to analyse the data. The analysis was done to identify the presence of the three pillars of sustainability and to rank the three pillars of sustainability based on the current practice in the Lestari School program. Qualitative responses from semi-structured interviews were recorded according to certain themes identified on the basis of sustainability pillars namely economic, social and environmental dimensions [19-24] as shown in Table 2.

Table 2: Dimension and Themes

Dimension	Themes
Economic	Cost management
	Financial benefits of good practices
	Business ethics
	Management of relationship with customers
	Participation and involvement of stakeholders
	Innovation management
Social	Engagement of stakeholders
	Relationships with suppliers and contractors
	Financing and construction of social action
	Concepts of social justice
Environmental	Natural resources
	Management of environmental policies system
	Life cycle of products and services
	Eco-efficiency
	Environmental education and training

Tables 3, 4 and 5 show verbal items obtained from semi-structured interviews that were conducted on the respondents. The first teacher interviewed was labelled as T1 and the second teacher was labelled as T2 in the Verbal Items Columns.

Table 3: Verbal Items for Economic Dimension

Themes	Verbal Items
Cost management	<p>“So, the science of providing pesticides, that's all they bought it from us. That's what we practice here, we wear it ourselves and some of it we do” (T2)</p> <p>“kemudian penggunaan sumber tu kalau boleh 2, 3 kali dia akan gunakan” (T2)</p> <p>“pertandingan keceriaan kelas, antaranya unsur-unsur err keceriaan dan kecantikan dengan kreativiti. Maksudnya dia...dia orang boleh create...create kelas dia menggunakan bahan-bahan terbuang” (T2)</p> <p>“Water savings near their school under the SAJ. We make competition, competition about water saving in the school” (T2)</p>
Financial benefits of good practices	<p>“Sekarang ni kita jualan aaa memang kita banyak jualan kat sini. Kita jual aaa aaa warga sekolah. Kemudian kat komuniti” (T2)</p> <p>“Jadi kita perkenalkan err macam mana kita nak kawal idea ternak puyuh tu supaya dapat kurangkan lalat” (T2)</p>
Business ethics	<p>“botol tu dia buang kat tempat yang betul. Bukan dalam tong sampah yang umum. Supaya nanti kita boleh... hasilnya boleh jual, ataupun boleh jadikan err kraftangan” (T2)</p> <p>“Kita nak perkenalkan kepada pelajar-pelajar cara tanaman hutan yang betul” (T2)</p> <p>“isu kelestarian ni kan kita boleh jadikan dia sebagai satu perkara bottom up dan top down issues” (T1)</p> <p>“Jadi kalau kita nak betul-betul menerapkan kelestarian ni kita perlu yang pertama ada modul dia” (T1)</p>
Management of relationship with customers	<p>“kita buat program kitar semula, jadi program kitar semula ni dia boleh jalankan di rumah memang kita nak dia jalankan di rumah pun tapi kita jadikan program di sekolah di mana dia kumpul barang-barang tu di rumah dan kami akan pergi ambil. Kita akan kutip guna lori” (T1)</p>
Participation and involvement of stakeholders	<p>“kita ada panggil pihak PIBK untuk saliran angkat” (T1)</p> <p>“Kita juga panggil ibubapa ke sekolah misalnya kat belakang kantin ni kita ada program perhutanan semula” (T1)</p>
Innovation management	<p>“Contohnya penggunaan balang-balang kitar semula kan, contohnya lebih dapur, lebih ladang, kita boleh jadikannya kompos” (T2)</p> <p>“We want to make an organic fertilizer ... a booster fertilizer” (T2)</p> <p>“Di peringkat ASEAN 2017, memang kita terima award untuk school peringkat ASEAN” (T2)</p> <p>“Program lestari sampai kita dapat johan kebangsaan tu 2014” (T2)</p> <p>“kementerian contohnya buat macam mini pameran seperti perpustakaan bergerak tu kan” (T2)</p>

Table 4: Verbal Items for Social Dimension

Engagement of stakeholders	<p>“Kita pun memang selalu libatkan ibubapa di dalam aktiviti kita melalui PIBG atau pihak PIBK” (T1)</p> <p>“Pihak sekolah ini memang memerlukan staf kakitangan. Di rumah dia boleh amalkan samada seorang atau ahli keluarga atau dengan rakan-rakan” (T1)</p> <p>“kita juga dipanggil oleh agensi luar untuk memperkenalkan kitchen-waste. Kompos...composting kan. Jadi kami pergi ke Flextronic, pergi ke sekolah-sekolah di daerah JB” (T2)</p>
Relationships with suppliers and contractors	<p>“MyGap ni di bawah Jabatan Pertanian. ... MyGap ni penting sebab bila kita ada sale MyGap makna kita punya product tu boleh kita pasarkan dengan mudah sebab kita ada sijil” (T2)</p> <p>“Ada 9 jenis pokok jadi itupun melibatkan pelajar dan agensi-agensilah” (T2)</p>
Financing and construction of social action	<p>“3R ni kitar semula... kan, guna semula dan penjimatan. Jadi err, pelajar-pelajar ni bila kita err berikan projek contohnya, dari aspek err pengurusan kewangan, ataupun sumber-sumber bahan-bahan mentah” (T2)</p> <p>“kita bentuk saliran dan kita jagalah sebagai saliran angkat dan kita dapat pembangunan daripada CM, daripada JAS, untuk naik taraf jalan, dan last sekali daripada NCRF... National River Cave Fund” (T2)</p>
Concepts of social justice	<p>“..dalam lesson plan tu kita masukkan elemen merentas kurikulum (EMK) yang itu adalah di bawah moral value iaitu nilai-nilai murni” (T1)</p> <p>“Dalam sains pun ada 1,2,3 dan sains 4,5 pun ada nilai-nilai murni, alam sekitar” (T2)</p>

Table 5: Verbal Items for Enviromental Dimension

Natural resources	<p><i>“Di bawah err penjimatan pun kita selalau tekankan, contohnya penggunaan baja, terutama penggunaan racun-racun kimialah. Sebab kat sekolah ni kita selalu buat sendiri racun organik, jadi kita meminimakan racun kimia” (T2)</i></p> <p><i>“perkenalkan kepada pelajarlah tu maknanya kat rumah nanti dia boleh kumpulkan air hujan. Kat sekolah kita ada 2 set tadahan air hujan” (T2)</i></p>
Management of environmental policies system	<p><i>“setiap persatuan kelab tu dia ada taman angkat. Jadi kita dapat lihatlah usaha-usaha mereka untuk menjaga taman itu merupakan salah 1 daripada penerapanlah, budaya pengamalan lestari” (T2)</i></p> <p><i>“kempen penjimatan tenaga tenaga elektrik yang latest masa hari raya tu kita pergi marhaban sambil kita err bawa pelekat kat dinding, penjimatan tenaga elektrik” (T2)</i></p>
Life cycle of products and services	<p><i>“contohnya paling senang tahun ni kita buat program kitar semula, jadi program kitar semula ni dia boleh jalankan di rumah memang kita nak dia jalankan di rumah pun tapi kita jadikan program di sekolah” (T1)</i></p> <p><i>“kita buat kempen untuk err kitar semula, kita keluarkan surat kepada parent ataupun komuniti err sesapa yang nak nak lepaskan dia punya barang-barang yang boleh kitar semula...peti ais sebagainya” (T2)</i></p>
Eco-efficiency	<p><i>“Jika sains pertanian memang secara langsung berkaitan dengan lestari lah” (T1)</i></p> <p><i>“Contohnya, penanaman dan penyelenggaraan pokok-pokok kan? Atau pun pokok yang ada tu dikekalkan, dijaga” (T2)</i></p> <p><i>“macam pelajar yang pergi Gunung Tahan ni kan, memang sepanjang... sepanjang err 7 hari tu, pengamatan saya memang err macam buang sampah, ataupun pembaziran tu memang memang macam takder. Jadi contohnya malah dia dia kalau perjalanan naik tu ada sampah-sampah dia akan kutiplah, tu yang kita buat” (T2)</i></p> <p><i>“Sebab tu kita buat saluran angkat kat sana. 2016 kita masuk pertandingan penjimatan air kan...penjimatan air tu” (T2)</i></p> <p><i>“sekolah lestari ni peringkat awal kita memang belajar sendirilah, seawal 2010, belajarlah dari internet, tengok sekolah-sekolah yang dah jadi, St Michael di Sabah, tengok apa yang mereka buat dan bawa balik untuk buat di sini” (T2)</i></p>
Environmental education and training	<p><i>“subjek-subjek lain memang ada la contohnya geografi kita ada pandu arah” (T1)</i></p> <p><i>“kita ada tengok peta topo grafik” (T1)</i></p> <p><i>“Bhs Inggeris lebih kepada di dlm bilik darjah kalau tak pun kita ada untuk simulasi aaaa speakin” (T1)</i></p> <p><i>“Contohnya saya di bawah penghijauan, greening, dan juga di bawah ko-ko, jadi memang banyak aktiviti yang saya libatkan pelajar-pelajar” (T2)</i></p> <p><i>“Subjek yang menekankan Enviromental Educational ni sains pertanian lah dan geografi” (T1)</i></p> <p><i>“contohnya yang program fertigasi tu kita panggil dia di luar waktu sekolah” (T2)</i></p> <p><i>“tetapi misalnya mereka dah habis belajar grammar misalnya jadi boleh lah di bawa keluar kelas” (T1)</i></p>

Those are the research approaches of this study using semi-structured interview. It conducted by some verbal items in some dimension which are economic dimension in Table 3, social dimension in Table 4 and environmental dimension in Table 5. Those are verbal items is used in order to achieve the anticipated result of this study that will elaborate in next section.

IV. RESULTS

The result of this study is determined by using qualitative method that could be achieved by using some variables item in economic, social and environmental dimensions. Furthermore, Figures 6, 7 and 8 show the nodes constructed using QSR Nvivo 12.0 Pro software according to their respective dimensions and themes.

Nodes					
Name	Sources	References	Created On	Created By	
Economic	0	0	1/10/2019 3:28:38 PM	IZZATI	
Business ethics	2	4	1/10/2019 3:35:38 PM	IZZATI	
Cost management	1	4	1/10/2019 3:34:56 PM	IZZATI	
Financial benefits of go	1	2	1/10/2019 3:35:20 PM	IZZATI	
Innovation managemen	1	5	1/10/2019 3:36:51 PM	IZZATI	
Management of relation	1	1	1/10/2019 3:35:52 PM	IZZATI	
Participation and involv	1	2	1/10/2019 3:36:27 PM	IZZATI	

Figure 7: Nvivo Screen Economic Dimension

Based on Figure 7, it shown the first column is the name of the node and followed by the sources and references columns. sources are columns that indicate how many sources have been used while references indicate the number of references that have been quoted from the sources. Then, Nvivo screen social dimension shows in Figure 8.

Nodes					
Name	Sources	References	Created On	Created By	
Enviromental	0	0	1/10/2019 3:29:16 PM	IZZATI	
Eco-efficiency	2	5	1/10/2019 3:41:10 PM	IZZATI	
Environmental educatio	2	7	1/10/2019 3:41:41 PM	IZZATI	
Life cycle of products a	2	2	1/10/2019 3:40:16 PM	IZZATI	
Management of environ	1	2	1/10/2019 3:39:48 PM	IZZATI	
Natural resources	1	2	1/10/2019 3:39:33 PM	IZZATI	

Figure 8: Nvivo Screen Environmental Dimension

Whereas the fourth column shows the date when the nodes were generated and the last column was the name of the author.

Nodes					
Name	Sources	References	Created On	Created By	
Social	0	0	1/10/2019 3:29:01 PM	IZZATI	
Concepts of social justi	2	2	1/10/2019 3:38:35 PM	IZZATI	
Engagement of stakeho	2	3	1/10/2019 3:37:44 PM	IZZATI	
Financing and construct	1	2	1/10/2019 3:38:19 PM	IZZATI	
Relationships with supp	1	2	1/10/2019 3:38:06 PM	IZZATI	

Figure 9: Nvivo Screen Social Dimension

For Nvivo software, the coverage column shows how much percent of coverage for that item is mentioned in an interview. It can be read by double-clicking on any of the nodes that want to read its coverage percentage. The coverage for each of these dimensions, Economic, social and environmental was recorded as shown in Table 5, Table 6 and Table 7 respectively.

Table 5: Economic Dimension Coverage

	References	Coverage (%)
Cost management	4	1.81
Financial benefits of good practices	2	0.78
Management of relationship with customers	1	5.70
Participation and involvement of stakeholders	2	3.27
Innovation management	5	1.28

Table 5 show the economic dimension, the theme with the most references is innovation management which is 5 while the lowest is management of relationship with customers which is only 1 value. Meanwhile, the highest value of coverage is management of relationship with customers is 5.70 while the lowest is 0.78 which is for financial benefits of good practices.

Table 6: Social Dimension Coverage

	References	Coverage (%)
Engagement of stakeholders	1	0.57
Relationships with suppliers and contractors	2	1.39
Financing and construction of social action	2	1.42
Concepts of social justice	1	0.36

In Table 6, the most references are in relationship with suppliers, and financing and construction of social actions with 2 value for the social dimension. Meanwhile, the lowest references for social dimension are engagement of stakeholder and concept of social justice with 1 value. Then, for the coverage the highest value is financing and construction of social actions with 1.39, while concept of social justice with 0.36 as the lowest value.

Table 7: Enviromental Dimension Coverage

	References	Coverage (%)
Natural resources	2	1.46
Management of environmental policies system	2	1.40
Life cycle of products and services	1	0.72
Eco-efficiency	4	2.93
Environmental education and training	2	0.71

For Table 7 show the environmental dimension, it is shown the most reference is eco-efficiency which is 4 values, while the lowest is Life cycle of products and services which is only 1 value. Then, the highest value of coverage is also eco-efficiency with 2.93 while the lowest is 0.71 for environmental education and training.

Table 8: Three-Pillar Sustainability Dimension Coverage

	Total References	Total Coverage (%)
Economic dimension	14	12.84
Social dimension	6	3.74
Environmental dimension	11	7.22

Based on Table 8, it clearly shown every dimension has the total number of referencess and coverage. For economic dimension, the total references 14 and total coverage 12.84. Then, in social dimension has 6 total references with total coverage 3.77. Meanwhile, in enviromental dimension has total referencess 11 value and 7.22 for total coverage.

Therefore, it clearly seems in Table 8 the highest dimension in three pillar of sustainability is ecomic dimension that has 14 references and 12.84 coverage. Its mean the school is realy concern and constantly strive to improve the

school's economy. Some of the activities that have benefited in the form of financial that include suggestions and comments from the following respondents example:

“So, the science of providing pesticides, that's all they bought it from us. That's what we practice here, we wear it ourselves and some of it we do” (T2)

“Water savings near their school under the SAJ. We make competition, competition about water saving in the school” (T2)

"We want to make an organic fertilizer ... a booster fertilizer" (T2)

From those respondent's statement. The activity such as producing their own pesticides from environmental substances, water-saving programs and producing their own organic fertilizers bring back to the school. That means the Lestari school model really considers with economic sustainability rather than the others pillar sustainability.

V. DISCUSSION

The paper is concerned about the three pillars of sustainability which economic, social and environment that is implemented in sustainable school. This sustainable school is expected could be implemented under the circumstances in Malaysia. It used Lestari school to apply these three pillars of sustainability to prove the concept of this study. In Lestari school, it used four components to develop model management which are curriculum, co-curriculum and green practice are also discussed in this paper. This paper used qualitative method to apply the sustainability dimension in Lestari school model with semi interview approach for some schools. Based on that, it compares the three-pillar of sustainability dimension in term of references and coverage. The study suggests that all sustainable school models have the three pillars of sustainability included in the models, and Lestari school model also proved to have all three pillar of sustainability to be presence and in practice. The findings from semi-structured interview shows that the economic dimension has the highest value in references and coverage, while the lowest is social dimension based on implementation in the Lestari School. It could be expected the Lestari School is mostly concerned in economic side of sustainability. For future research, this study suggests improvement of sustainable school programs in Malaysia is necessary in order for the three pillars of sustainability to be equally represented.

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