

## Implementation of an assessment model of educational sustainability: Application of phases-based assessment

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### Abstract

The purposes of this research were to assess the educational sustainability of an educational project based on phases-based assessment and to assess the results of the educational project. The participants were stakeholders of the educational project and experts, who were acquired by purposive sampling. The instruments were the assessment forms of the educational sustainability and assessment results. The data were analysed by content analysis, mean and standard deviation. The research results found that the initial sustainability assessment focused on the feasibility and the sustainability assessment in progress towards sustainability also focused on the feasibility. The project had feasibility of sustainability at a very high level. The true sustainability assessment focused on true sustainability, and the project had true sustainability at a very high level. In addition, all the standards of model assessment consisted of feasibility, propriety, accuracy and utility, which were at very high levels for all the models.

Keywords: Educational sustainability, phases-based assessment, assessment.

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## 1. Introduction

Sustainability is an important concept and the keyword in every field in today's world (Lazar & Chithra, 2021), leading to sustainable development as mentioned by Kaldas et al. (2020), who stated that sustainability assessment is an essential part of sustainable development. Furthermore, sustainability is linked to the idea that local knowledge is more valuable than universal knowledge, which is tied to the concept of resilience and may support not just local capacity-building, but also co-design and collaborative projects (Parsons et al., 2016). Rocha Paz et al. (2021) stated that the challenge for organisational sustainability is in understanding that all dimensions of sustainability have the same importance in the organisation. The concept of organisational sustainability, according to Munck and Souza (2012), is composed of several actions that, together with organisational activities and decision-making processes, aim to positively benefit society (Rocha Paz et al., 2021). This means that sustainability is spread and linked to all branches in a way that reflects continuous improvement, which challenges the importance of the organisation.

Sustainability can generally be classified into three pillars (economics, society, and environment) that are mainly self-contained (Axelsson et al., 2013; Tang & Al Qahtani, 2020). In relation to Johannesdottir et al.'s (2021) study, the sustainability dimensions, environment, economics, sociocultural aspects, health, technology, as well as frameworks for sustainability implementation, are examined (strategic, tactical, and operational) (Chofreh & Goni, 2017). Spangenberg (2002) stated that sustainability is a multifaceted concept, with institutional, economic, social and environmental dimensions. Di Maria et al. (2020) stated that the three main sustainability aspects (environmental, social and economic) and sustainability based on the three pillars conception of sustainability are usually selected from the economic, social, and environmental dimensions (Purvis et al., 2019). Therefore, it was found that the majority of stillness was studied in the three areas: economics, social and environmental. Furthermore, Virtanen et al. (2020), in addition to the three aspects mentioned above, stated that 'sustainability' is conceptualized the context-based relationality can take many forms, including community-based government, education, language, quality of life, and health.

This means that other areas will be able to study sustainability in the same way, whether it is education, quality of life or more. According to the data, sustainability assessments are found in the dimensions of economy, society, and environment, but the dimension of educational sustainability assessment study has not been found.

Sustaining challenges for future directions (Ni, 2010) and educational sustainability assessments are important, which may be an activity, plan, plans, program, project, course, or curriculum, which sustainability analyses can be a useful tool in making technical innovation decisions (Johannesdottir et al., 2021); however, the sustainability assessment of the level of systems, plans and/or regulations is complex (Di Maria et al., 2020) in addition to the classification for sustainability assessment and measures are based on purpose, scope and context (Brandon & Lombardi, 2011; Mahmoud et al., 2019). Different aspects or tools have been identified to measure sustainability (Yarime & Tanaka, 2012). Therefore, complex educational sustainability assessments must be considered according to the goals and context of each assessment. When considering what is intended to be evaluated, it was found that it can be classified according to the assessment phases, i.e., not yet implemented, in progress or completed.

The assessments lead to data that reflected the reality of what is intended to be: an assessment that is yet to start a project, is in progress or is completed. Hose information reflects the sustainability of what is intended to be evaluated, leading to a strategic adjustment and improving the implementation

or adjustment of import factors, processes or productivity to develop sustainable assessments. According to the information, such a necessity raises the following research questions: What are results of the assessment of educational sustainability of the educational projects based on phases-based assessment? and What are the assessment results of the educational project?

### *1.1. Related Research*

#### *1.1.1. Concept of sustainability*

The concept of sustainability presented the topics of sustainability characteristics and sustainability assessment as follows: the significance of sustainability was emphasized principally on the assumption that a journey will promote a continuous improvement and adaptability process (Minerals Council of Australia, 2006). Johnston et al. (2007) stated that sustainability refers to the ability to continue an activity or behavior (i.e. continued indefinitely), Furthermore, sustainability meant meeting our own needs without jeopardizing future generations' ability to meet their own expectations.

Generally, the ability of an economy to retain at least the same (or a greater) level of economic, environmental, and social resources over generations was referred to as sustainability (Menegaki & Tsani, 2018). However, O'Brien and Sarkis (2015) stated that new courses within and outside of the curriculum that expressly focused on sustainability, activities, and programs, as well as modeling sustainable practices through school infrastructure, operations, governance, and faculty lives, can all help to incorporate sustainability. According to the above, sustainability, in addition to being related to economic, environmental and social dimensions, is also related to education.

The indicator was a reflection of its sustainability characteristics. Which, an operational representation of a system property might be described as a sustainability indicator, tools such as indicators and indices have been developed (Waas et al., 2014; Mapar et al., 2020). Sustainability assessments require indicators, which the instruments for assessing sustainability range from indicators to full models and composite indices (Yigitcanlar et al., 2015; Ndeke, 2011). In addition, Mapar et al. (2020) stated that sustainability assessment tools have given local governments a way to evaluate their progress toward sustainable development and to help policymakers in these aspects of sustainability assessment.

#### *1.1.2. Educational assessment*

Educational assessment presented the topics of scope of educational assessment, phases of evaluation and standards for educational evaluation as follows: educational assessment covers the field of evaluation. According to Scriven (1999), the Big Six evaluation- program, personnel, performance, policy, proposal, and product evaluation - comes under the umbrella of applied social psychology, and most of it – for example, the evaluation of large-scale social interventions. For types of purpose-based evaluations consisted of placement assessment, formative assessment, diagnostic assessment, and summative assessment. Moreover, Student, curriculum, school, and personnel evaluations were all types of evaluations dependent on what was being reviewed (Gafoor, 2013).

A wide range of the phases of evaluation ideas has been proposed and the first approach has three phases. Gafoor (2013) presented the phases of the evaluation as follows: the planning phase, the process phase and the production phase. Glen (1988) presented the three phases of programme evaluation: 1) formative assessment (gathering and sharing data to improve a program), 2) summative assessment (judging how effective the program has been and how well program goals have been met), and 3) impact assessment (determining the long-term effects on the greater community). In addition, Khan and Rahman (2017) presented as well three major stages of policy evaluation i.e. Evaluation during

the planning, implementation, and post-implementation stages, as well as impact assessment. The evaluation must adhere to suitable standards and criteria at every level.

With regard to the second approach of the four phases according to the Agency for Toxic Substances and Disease Registry (2015), presented as four stages to the program evaluation process.: 1)planning was the relevant questions during evaluation planning and the implementation process includes determining the viability of the evaluation, identifying stakeholders, and defining short- and long-term objectives, 2)implementation (formative and process evaluation) was possible to analyze whether a program is successfully attracting and retaining the desired participants if it was evaluated throughout its execution, 3)finished (summative, outcome, and impact) Following the program's completion, an evaluation may look at its immediate outcomes or long-term impact, or describe its overall performance, such as its efficiency and sustainability, and 4) reporting and dissemination to guarantee that results are disseminated and reported to all appropriate audiences in a complete and methodical manner, a dissemination plan should be developed during the evaluation's planning stage. The United Nations Office on Drugs and Crime (2017) described the evaluation process as having four overall phases: 1) planning, 2) preparation, 3) implementation and 4) follow-up. Bauman and Nutbeam (2014) also presented four stages of programme evaluation: pre-programme planning, planning, programme implementation and programme impact and outcomes.

According to the phases of evaluation mentioned above, the overview can be summarised into three phases: pre-conduction (planning), the process of conducting (implementation, formation and process evaluation) and post-conduction (product, outcome, impact, summation and follow-up evaluation).

With regard to the standards for educational evaluation, The Joint Committee on Standards for Educational Evaluation (JCSEE) (1994) recognized four primary types of standards: propriety, utility, feasibility, and correctness, and developed an essential and practical resource for enhancing program evaluation to think about when evaluating a program. Propriety standards ensure that the assessment was carried out lawfully and ethically, as well as supporting the welfare of individuals who are participating in or affected by the program evaluation. Utility standards were designed to ensure that the evaluation would match the information demands of the target audience. Feasibility standards were created to ensure that the scope and techniques of the evaluation were realistic. In addition, accuracy standards were aimed to guarantee that evaluation reports employ valid evaluation methods and that the methodologies are described transparently.

### *1.2. Conceptual Framework*

The assessment of educational sustainability of the educational projects can be carried out through analysing the nature of a project that has not yet been started, in progress or completed. Conducting phases-based assessments consist of pre-conduct, process conduct and post-conduct, which are indicators and criteria assessments for all models. Furthermore, all assessment results were assessed and applied on the following four standards for educational evaluation: feasibility, propriety, accuracy and utility. Based on the concepts mentioned above as Figure 1.

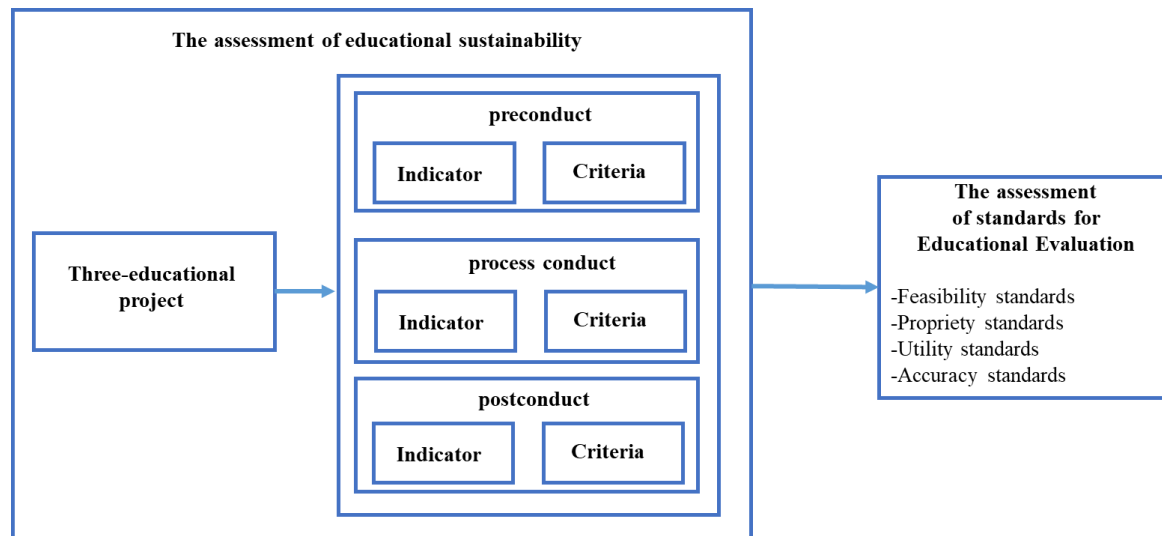


Figure 1. Conceptual framework of the research

### 1.3. Purpose of the Study

The research objectives were to assess educational sustainability of the educational projects based on phases-based assessments and to assess the assessment results of the educational project that relate to the standards for educational evaluation.

## 2. Method and Materials

### 2.1. Research Model

This research uses an evaluation research model which is phases-based assessment and is related to the standards for educational evaluation. The details consist of participants, data collection tools, data collection process and data analysis, which are explained below.

### 2.2. Participants

#### 2.2.1. Participants assessed on educational sustainability of educational projects based on phases-based assessment

The participants were divided into 20 participants for pre-conduct, 20 participants for process conduct and 20 participants for post-conduct, who were acquired by purposive sampling. The participants were stakeholders in the educational project, wherein the optimal sample size for a single case project was 15–30 (Vasileiou et al., 2018).

#### 2.2.2. Participants' assessment results of the educational project applying the educational evaluation standards

Twenty participants of the educational project were experts in the project, who were acquired by purposive sampling. They had an experience of more than 5 years in relation to the project, and the optimal sample size for an expert group was 20 subjects (Peat, 2011).

### 2.3. Data Collection Tools

#### 2.3.1. Instruments for the assessment of educational sustainability of the educational project based on phases-based assessment

The instruments consisted of two forms: 1) the manual for the implementation of the assessment model for educational sustainability, which was verified by five experts; the results appeared to be appropriate for the assessment. It was easy to understand and easy to implement in all contexts related to educational sustainability, and the index of consistency was between .80 and 1.00; and 2) the assessment of educational sustainability, which consisted of the initial sustainability assessment form for pre-conduct five-level focuses on the feasibility of sustainability (9 indicators and 18 items), the sustainability assessment form in progress towards sustainability for process product five-level focuses on the feasibility of sustainability (12 indicators, 24 items), and the natural/true sustainability assessment form for post-conduct five-level focuses on the nature or true of sustainability (13 indicators, 26 items). The verified content validity by the index of consistency from five experts ranged between 0.60 and 1.00 for pre-conduct and post-conduct and between 0.80 and 1.00 for process conduct.

### *2.3.2. Instruments for assessment of the results of the educational project applying the standards for educational evaluation*

The results of the assessment form of the educational project applying the standards for educational evaluation consisted of feasibility standards (3 items), propriety standards (7 items), accuracy standards (11 items) and utility standards (5 items). The verified content validity by the index of consistency from five experts ranged between 0.60 and 1.00.

## *2.4. Data Collection Process*

### *2.4.1. Selection of the educational project to assess educational sustainability*

Three educational projects were selected for assessment of educational sustainability comprehensively at all stages, which were classified according to three phases-based assessment phases: pre-conduction (planning), process of conducting (implementation, formation and process evaluation) and post-conduction (product, outcome, impact, summation and follow-up evaluation).

The initial sustainability assessment which focused on the feasibility of sustainability (pre-conduct) was 'The Professional Standards Examination Project', which is a project that has not been started.

The sustainability assessment in progress towards sustainability which focused on the feasibility of sustainability (process conduct) was 'The Pre-Exam Preparation V-NET Project', which is a project in progress.

The natural/true sustainability assessment which focused on the true nature of sustainability (post-conduct) was 'The National Vocational Education Testing Project', which was a completed project.

### *2.4.2. Assessment of educational sustainability of the educational project based on phases-based assessment*

Project evaluations were conducted to reflect sustainability based on the indicators and assessment criteria of each phase, which is pre-conduct (9 indicators and 18 items), process conduct (12 indicators and 24 items) and post-conduct (13 indicators and 26 items).

### *2.4.3 Assessment of the results of the educational project applying the standards for educational evaluation*

Stages of the research process and assessment results of all the projects applying the four standards for educational evaluation, feasibility, propriety, accuracy and utility, are shown in Figure 2.

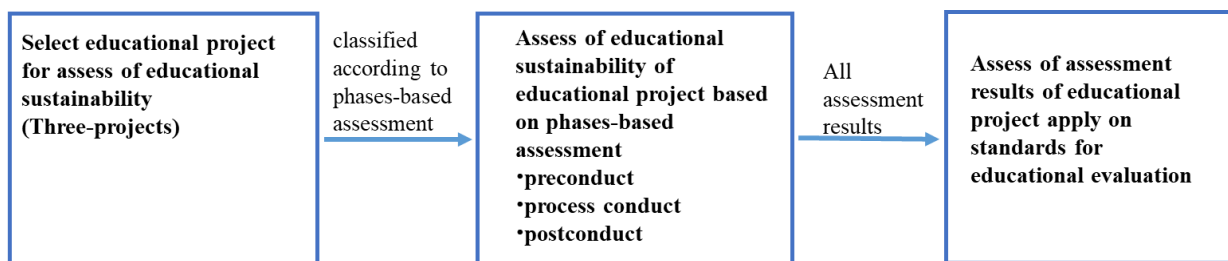


Figure 2. Research process

## 2.5. Data analysis

### 2.5.1. Analysis of data for the assessment of educational sustainability of the educational project based on phases-based assessment

The data were analysed by content analysis, mean and standard deviation. The assessment criteria are constructed according to the normal curve, which is characterised by a wide middle-area range and a narrow margin range (Chianchana, 2019); the criteria are presented in Table 1.

Table 1. Interpretation of the assessment-based results of sustainability and standards for educational evaluation

Feasibility of sustainability (pre-conduct and process conduct) and natural/true sustainability (post-conduct)		Standards for educational evaluation	
Score	Interpretation	Score	Interpretation
4.50-5.00	Very high	4.50-5.00	Very high
3.50-4.49	High	3.50-4.49	High
2.50-3.49	Medium	2.50-3.49	Medium
1.50-2.49	Low	1.50-2.49	Low
1.00-1.49	Very low	1.00-1.49	Very low

### 2.5.2. Data analysis for the assessment of results of the educational project applying the standards for educational evaluation

The data were analysed by content analysis, mean and standard deviation.

## 3. Results

### 3.1. Result of the assessment of educational sustainability of the educational project based on phases-based assessment

The assessment of educational sustainability was for the educational project ‘The Professional Standards Examination Project’. It was the initial sustainability assessment which focused on the feasibility of sustainability (pre-conduct); the research results found that the summary of this project had the opportunity of sustainability at a very high level. Majority of the items had feasibility on sustainability at a very high level and some of the items had a high level. The reliability of the project assessment was 0.57.

The assessment of educational sustainability was for the educational project ‘The Pre-Exam Preparation V-NET Project’. It was the sustainability assessment in progress towards sustainability which focused on the feasibility of sustainability (process conduct); the research result found that the summary of this project had the opportunity of sustainability at a very high level and all items had feasibility on sustainability at a very high level. The reliability of the project assessment was 0.67.

The assessment of educational sustainability was for the educational project ‘The National Vocational Education Testing Project’. It was natural/true sustainability assessment which focused on the true nature of sustainability (post-conduct); the research result found that the summary of this project had natural/true sustainability at a very high level and all items had the opportunity of sustainability at a very high level. The reliability of the project assessment was 0.79, as shown in Table 2.

Table 2. The assessment of educational sustainability

Pre-conduct		Process conduct		Post-conduct	
Assessment items	Mean (SD)	Assessment items	Mean (SD)	Assessment items	Mean (SD)
1. Project had the opportunity to operate with resources suitable for contextual conditions.	4.80 (0.41)	1. Project was executed with resources that appropriate for contextual conditions.	4.80 (0.41)	1. Project when completed uses resources that were appropriate for contextual conditions.	4.75 (0.44)
2. Project had the opportunity to operate on a sufficient budget.	4.55 (0.51)	2. Project was executed on a sufficient budget.	4.60 (0.50)	2. Project when completed the budget had sufficient.	4.65 (0.49)
3. The project had clear evidence of guidelines aimed at sustainable development.	4.60 (0.50)	3. Project had monitor of actions.	4.65 (0.49)	3. Project when completed uses resources cost-effectively.	4.90 (0.31)
4. The project contains information that represents practical possibilities.	4.85 (0.37)	4. Project had examination and evaluation.	4.70 (0.47)	4. Projects when completed use learning resources efficiently.	4.70 (0.47)
5. The project was part of a policy that will clearly promote work.	4.80 (0.41)	5. Project was implemented by stakeholders.	4.70 (0.47)	5. Project had performance result that concurrence the needs of stakeholders.	4.55 (0.51)
6. The project was worth keeping up with current conditions.	4.70 (0.47)	6. Project was reflected by stakeholders.	4.65 (0.49)	6. Project had performance result that response the needs of stakeholders.	4.65 (0.49)
7. The project was specified in the action plan.	4.90 (0.31)	7. Project can continue at present.	4.75 (0.44)	7. Project had performance result that cost-effectively.	4.60 (0.50)
8. The project had an action plan that offers practical opportunities.	4.55 (0.51)	8. Project can adapt to the current situation.	4.75 (0.44)	8. Project had performance result that benefit.	4.60 (0.50)
9. The project had the possibility to meet their goals.	4.45 (0.51)	9. Project can be continuously develop.	4.85 (0.37)	9. Project when completed, had been used data for benefit.	4.70 (0.47)
10. The project had the possibility of no obstacles to action.	4.45 (0.51)	10. Project was currently progressing.	4.80 (0.41)	10. Project when completed, had been used data for development.	4.75 (0.44)
11. The project had the possibility of self-impact.	4.60 (0.50)	11. Project had developed stakeholders.	4.70 (0.47)	11. Project when completed, had been constantly monitored.	4.80 (0.41)



Pre-conduct		Process conduct		Post-conduct	
Assessment items	Mean (SD)	Assessment items	Mean (SD)	Assessment items	Mean (SD)
12. The Project was likely to have an impact on organisations.	4.70 (0.47)	12. Project had created the good motivation with stakeholders.	4.60 (0.50)	12. Project when completed, had been updated with the evaluation results.	4.75 (0.44)
13. The project was likely to have an impact on stakeholders.	4.90 (0.31)	13. Project had created a caring bond with stakeholders.	4.55 (0.51)	13. Project when completed was also constantly development.	4.65 (0.49)
14. The project had the possibility of causing an impact on society.	4.65 (0.49)	14. Project had promoted of learning for stakeholders.	4.65 (0.49)	14. Project when completed was also still progress.	4.70 (0.47)
15. The project had the possibility of self-benefit.	4.80 (0.41)	15. Project had encouraged communication between stakeholders.	4.75 (0.44)	15. Project when completed was also effect on a good working atmosphere.	4.70 (0.47)
16. The project had the possibility of benefiting the agency.	4.70 (0.47)	16. Project had exchanged opinions between stakeholders.	4.90 (0.31)	16. Project when completed was also effect on an atmosphere of learning for work.	4.80 (0.41)
17. The project had the possibility of creating a good working atmosphere.	4.85 (0.37)	17. Project encourages stakeholders to be social responsibility.	4.65 (0.49)	17. Project when completed cause an impact on themselves.	4.60 (0.50)
18. The project offers the possibility of creating an atmosphere of learning towards work.	4.75 (0.44)	18. The project has activities that raise consciousness of social responsibility.	4.65 (0.49)	18. Project when completed cause an impact on the organisation.	4.75 (0.44)
summary	4.70 (0.45)	19. Project makes stakeholders feel good and lively as they perform.	4.55 (0.51)	19. Project when completed cause an impact on stakeholders.	4.55 (0.51)
reliability = 0.57		20. Project makes stakeholders enjoy while they perform.	4.50 (0.51)	20. Project when completed cause an impact on society.	4.60 (0.50)
		21. Project makes stakeholders feel while they perform as a learning practice.	4.90 (0.31)	21. Project when completed cause multi-dimension learning.	4.50 (0.51)
		22. Project makes stakeholders feel while they perform; everything can change and develop.	4.85 (0.37)	22. Project when completed cause constantly development themselves.	4.65 (0.49)
		23. Project had managed the fullest.	4.75 (0.44)	23. Project when completed was also still being performed.	4.65 (0.49)

Pre-conduct		Process conduct		Post-conduct	
Assessment items	Mean (SD)	Assessment items	Mean (SD)	Assessment items	Mean (SD)
		24. Project had managed transparently.	4.75 (0.44)	24. Project when completed was also practice as routine tasks.	4.70 (0.47)
		summary	4.71 (0.45)	25. Project when completed caused the stakeholders to feel good, lively and want to continue.	4.55 (0.51)
		reliability = 0.67		26. Project when completed cause the stakeholders feel entertained, and want to continue.	4.80 (0.41)
				summary	4.68 (0.47)
				reliability = 0.79	

### 3.2. Result of the assessment of the results of the educational project applying the standards for educational evaluation

The assessment of the pre-conduct, process conduct and post-conduct models found that:

The feasibility ‘the methods used in the assessment model are practically feasible, good economic. It's not too much hassle’.

The propriety ‘the implementation of the assessment model does not affect those involved in the project and does not cause any damage to the assessment results’.

The accuracy ‘the information obtained from the implementation of the assessment model represents the importance of the project being evaluated and represents the identity of the project’.

The utility ‘assessment results based on the assessment model provide information to meet the desired goals’.

In addition, it was found that all standards of model assessment consisted of feasibility, propriety, accuracy and utility, which were at very high levels for all models, and the reliability of project assessment was 0.76, 0.71, and 0.71, respectively. The results are shown in Table 3.

Table 3. *The assessment of the results of the educational project*

Standards of educational evaluation	Pre-conduct		Process conduct		Post-conduct	
	Mean	SD	Mean	SD	Mean	SD
<i>Feasibility Standards</i>						
1. It can be action carried out practically.	4.85	0.37	4.85	0.37	4.80	0.41
2. There was a possibility of being accept by stakeholders.	4.90	0.31	4.70	0.47	4.90	0.31
3. There was a possibility of a cost-effective result.	4.80	0.41	4.85	0.37	4.60	0.50
summary	4.85	0.36	4.80	0.40	4.77	0.41

Standards of educational evaluation	Pre-conduct		Process conduct		Post-conduct	
	Mean	SD	Mean	SD	Mean	SD
<i>Propriety Standards</i>						
4. It can be carried out efficiently.	4.70	0.47	4.60	0.50	4.80	0.41
5. Able to respond thoroughly to stakeholders	4.70	0.47	4.70	0.47	4.60	0.50
6. I can be accept in stakeholders' practice.	4.80	0.41	4.85	0.37	4.60	0.50
7. It can be carried out without adversely affecting stakeholders.	4.70	0.47	4.70	0.47	4.50	0.51
8. It can be action fair all parties.	4.60	0.50	4.75	0.44	4.70	0.47
9. It can report straightforward	4.75	0.44	4.75	0.44	4.80	0.41
10. It can be apply appropriately to the school context.	4.80	0.41	4.80	0.41	4.85	0.37
<i>summary</i>	4.72	0.45	4.74	0.45	4.70	0.46
<i>Accuracy Standards</i>						
11. Clear in practice.	4.80	0.41	4.85	0.37	4.65	0.49
12. Easy to understand	4.70	0.47	4.75	0.44	4.65	0.49
13. Easy to conduct	4.60	0.50	4.55	0.51	4.70	0.47
14. It can be collected the data from sources that are used in operations.	4.65	0.49	4.45	0.51	4.85	0.37
15. Data are accurate	4.60	0.50	4.75	0.44	4.60	0.50
16. Data are consistent.	4.70	0.47	4.70	0.47	4.45	0.51
17. Data are executed systematically	4.60	0.50	4.70	0.47	4.75	0.44
18. Data can be analysed correctly.	4.85	0.37	4.75	0.44	4.75	0.44
19. It can conclusions reasonable.	4.80	0.41	4.70	0.47	4.60	0.50
20. It can present reports straightforwardly	4.80	0.41	4.80	0.41	4.75	0.44
21. It can lead to perception of assessment results.	4.80	0.41	4.85	0.37	4.70	0.47
<i>summary</i>	4.72	0.45	4.71	0.45	4.68	0.47
<i>Utility Standards</i>						
22. It can lead to changes in performance.	4.50	0.51	4.50	0.51	4.80	0.41
23. It can lead to applying benefit.	4.55	0.51	4.60	0.50	4.85	0.37
24. It can lead to the reliability of the performance.	4.75	0.44	4.65	0.49	4.65	0.49
25. It can lead to practicality in the current conditions.	4.70	0.47	4.90	0.31	4.85	0.37
26. It can lead to continuous improvement and development.	4.65	0.49	4.75	0.44	4.65	0.49
<i>summary</i>	4.63	0.49	4.68	0.46	4.76	0.43
<i>reliability</i>	0.76		0.71		0.71	

#### 4. Discussion

According to the findings, the pre-conduct and process conduct showed that the project had the feasibility of sustainability at a very high level, and the post-conduct showed that the project had the natural/true sustainability at a very high level. Overall, the project has a very high level of assessment of both feasibility and sustainability in all cases, possibly because the projects assessed are characteristics of feasibilities and natural sustainability. Sustainability is a measure of one's ability to operate with self-reliance and future survival (Schweitzer, 2015). The feasibility of sustainability according to Krieger et al. (2016) the term "feasibility" refers to a method of predicting the outcome of an investigative examination or assessment of a proposed program, as well as possible outcomes. Dvir

et al. (1998) determined that proper feasibility is essential for probable achievement. In addition, Mintzberg et al. (1976) stated that feasibility is important and essential to evaluate whether any proposed project is feasible or not. Furthermore, related to the concept sustainability assessment, Verheem (2002) stated that one purpose of sustainability evaluation was to ensure that plans and activities contributed as much as possible to long-term development. Devuyt (2001) stated that assessment of sustainability is a process that can aid decision-makers and policy-makers in determining which steps should be taken to make society more sustainable. This is why the projects evaluated are likely to be sustainable.

The true sustainability characteristics of a project are natural. This is continuity is related to, according to Munoz-Torres et al. (2019), traceability in the product's sustainable management, assurance and continuous improvement. Stufflebeam and Zhang (2017) stated that the component of product evaluation that analyzes the extent to which a program's contributions will be or are successfully institutionalized and continued over time is called sustainability evaluation. Client groups utilize the results of this form of evaluation to assist them decide whether or not to continue with a program.

According to the findings, all standards of model assessment consisted of the feasibility, propriety, accuracy, and utility standards were at the very high level of all models. In all standards, it is important to show the results of the assessment. The fact that the sustainability assessment results of the project are of all standards may be due to the initial classification of the project to have an appropriate assessment for the phases-based assessment, and assessment results of all projects in both pre-project, in progress, and after conduction, appropriate assessment indicators and criteria are designed in each model. This reflects the possibilities of sustainability and sustainability, thus reaching the standard. JCCSEE (1994) the feasibility is designed as an a useful and vital resource for enhancing program assessment. They are meant to ensure that the scope and techniques of the evaluation are realistic, propriety aim to ensure that an evaluation is carried out in a legal, ethical, and welfare-oriented manner, accuracy is meant to ensure that assessment reports are transparent and use reliable evaluation methodologies, and utility is aimed to guarantee that the evaluation meets the target users' information demands. Furthermore, the standards it also reflects the concept meta-evaluation according to Stufflebeam & Zhang (2017) meta-evaluation findings are used by client groups to help ensure the soundness of an evaluation (e.g., utility, feasibility, propriety, accuracy, and utility) and to judge the extent to which the evaluation's findings merit serious consideration and use. Meta-evaluation is the process of delineating, obtaining, and applying descriptive and judgmental information about the utility, feasibility, propriety, and accuracy of a guide for the evaluation, as well as public reporting of its strengths and weaknesses (Stufflebeam, 2000).

## **5. Conclusion**

The assessment of educational sustainability of the educational projects can be made through an analysis of the phase of a project based on the phases-based assessment (pre-conduct, process conduct and post-conduct). In addition, all assessment results were assessed by applying the standards for educational evaluation. The results of the assessment of educational sustainability of the educational project based on phases-based assessment show that the initial sustainability assessment focuses on the feasibility of sustainability (pre-conduct), wherein the project had a feasibility of sustainability at a very high level. The sustainability assessment in progress towards sustainability focused on the feasibility of sustainability (process conduct), and the project had a feasibility on sustainability at a very high level. The natural/true sustainability assessment focused on the true nature of sustainability (post-conduct), and the project had a natural/true sustainability at a very high level. In addition to the

assessment of the pre-conduct, process conduct and post-conduct models, all standards of model assessment consisting of feasibility, propriety, accuracy and utility had very high levels of sustainability.

## 6. Recommendations

The implementation of the findings should evaluate sustainability according to the phases-based assessment. The assessment is classified according to the assessment steps as follows: pre-conduction (planning), process of conduction (implementation, formation and process evaluation) and post-conduction (product, outcome, impact, summation and follow-up evaluation). Moreover, the conduction of evaluations to reflect sustainability is based on the indicators and assessment criteria. The next research should be conducted by applying the phases-based assessment in typical multiple case studies and multi-site study applying the scope of assessment (e.g., activity, plan, programme and curriculum), developing assessment criteria for sustainability assessment in qualitative criteria type and developing phases-based assessment models by digital technology.

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