# ASSESSING THE RELEVANCE AND ADEQUACY OF THE PERFORMANCE INDICATORS TO THE SCHOOL STRATEGIC GOALS AND EVALUATION REPORT IN A K-12 SCHOOL

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#### **ABSTRACT**

This study assessed the relevance and adequacy of the performance indicators to the strategic goals and evaluation report of one private school in Sharjah, UAE. It employs one case study framed after the PDSA model. Coding was used as a technique to content analyze texts from the school's BSC and further supported by a review of the minutes of the meeting and interview of the selected school leaders who have a hand in the performance monitoring. Research revealed that the performance indicators mapped out in the BSC are relevant, however, there are missing indicators for some educational factors identified in the school evaluation report. These are SOD learning achievement, lesson delivery, and planning, participation of the governing body, and performance monitoring by the school subject leaders. When these factors are not monitored, it will affect learning equity, internal locus of control, strategic leadership, and accountability. School leaders need to supply these factors with relevant indicators, make the entire community aware of the performance measures and allow other school leaders to create their unique indicators being monitored regularly to support the organization's success.

**Keywords**: Balanced Score Card (BSC), Key Performance Indicators, Key Results Indicators, School Performance.

## INTRODUCTION

The spread of COVID-19 infection impacted a large majority of the sectors in the community including education. Registration plummeted in some Private schools as compared to the student registration before the Pandemics. If this is not addressed, the financial aspects would not be stable and lead eventually to school closure.

While some stakeholders embrace the inevitable education delivery modalities, not a lot of them are satisfied by it. In AIAS, a 64% satisfaction rating was obtained from the education delivery model during its internal performance measures at the onset of the academic year 2020-2021 (Pelayo, 2021). This rating is way too low than what it hoped to be at the target of 85%. Comments from the survey raised issues on teacher communication, quality of the internet connection, access to the resources, and the quality of learning. These findings are confirmed in the whole Emirate through the strategic report made by (Erfurth & Ridge, 2021). Their studies revealed that parents are exhausted from keeping their children focused in front of their devices at home. Working parents have very limited time and capacity to help their children in their studies through the online delivery model and the limited space at home, particularly for poorer families. These made students difficult to

concentrate which in effect suffer the quality of their learning. Learning losses have been a deleterious effect of the school closure along with the increase of inequality (The Impact of COVID-19 on Education – Recommendations and Opportunities for Ukraine, n.d.). It is then a challenge on the shoulder of school leaders to find ways to systematically avoid such poignant losses and inequalities inevitably brought by the Pandemics.

Performance monitoring has gained popularity in many universities for purposes of improving educational services (Sencan & Karabulut, 2015) however there are very limited researches on its use in K-12 school organization. When performance is monitored and measured systematically against the goals and targets, the organization has a more systematic way to identify the strengths and the weaknesses which in turn is better able to identify the priorities for improvement (Hamilton, n.d.). Performance indicators that are strategic, outcome-oriented, or supportive to enhance the achievement of other indicators are considered relevant. When an organization has a misfit indicator to its targets, there is a greater chance that the organization will not meet a long-term desired growth (Badawi et al., 2016). As applied in the educational setting, performance monitoring, and measurement when done systematically and consistently will lessen if not avoid the learning losses and inequalities. Through this context, this research assessed the alignment of the available performance indicators being used in school and identify those that are relevant to impact school performance. Moreover, this paper suggests other potential indicators that can be used by the school to further assist in leveraging their education performance. To assess the performance indicators used in the school, the following research questions were explored.

- 1. Which among the performance indicators from the school's current Balanced Score Card are relevant?
- 2. What relevant performance indicators can be added to promote the organization's growth?
- 3. What are the potential implications to the school when the suggested performance indicators were measured strategically in school?
- 4. What plans of action can be proposed to make the school's performance indicators relevant?

#### REVIEW OF RELATED LITERATURE AND STUDIES

This part presents literature and studies that have a bearing on this study. Three subtopics were outlined. These are Balanced Score Card and Its perspectives, BSC in education, and Key Performance Indicators. These topics will support the foundation of identifying the relevant performance indicators.

## Balanced Score Card (BSC) and Its Perspectives.

Kaplan and Norton developed the well-known balanced scorecard as a management accounting tool during the 1990s (Kaplan & Norton, 2001) after a thorough assessment of the needs of different organizations to perform well in terms of business for increased financial gain (Davis, 2005). The balanced scorecard is composed of the four major perspectives such as learning and growth, internal process, customer, and financial (Koumpouros, 2013; Wu H-Y, 2012)

According to Al-Hosaini & Sofian (2015), the organization's performance is measured through the balanced scorecard's financial perspective. It is based on a cause-and-effect relationship while connecting non-financial interdependent variables such as customers, process, employees, and system performance. The same is applied to educational institutions

looking to reach a longer return on investment and veering to meet the organization's objectives and goals.

To clarify the uses of the balanced scorecard, Kaplan & Norton (2001) created a list as a guide for companies among which are to clarify and update a strategy, communicate the strategy within the organization, align the goals of the individuals and departments or teams to the developed strategy, link the budget and long-term goals to objectives, and improve the strategy by conducting performance reviews. The goal of using the balanced scorecard in education is to motivate educational institutions to evaluate organizational success through the effectiveness of the school improvement plans. Evaluating the organizational performance will be valuable to decision-makers, payment schemes, and in this case, the teachers. Such assessments will also help unit heads in upholding performance quality (Rapoport, et al., 2003). It is, for this reason, it is pertinent to select the rational methods and indicators that will echo the evaluation (Wu H-Y, 2012). The balanced scorecard tool shows the cause-and-effect of the four perspectives (Kaplan & Norton, 2001); (Figure 1) financial, customer, internal process, and learning and growth. Our challenge is to adapt the traditional corporate strategy and use it appropriately for schools and demonstrate its own goals, objectives, mission, and vision. The four perspectives are linked together to drive business performance where the end goal is improved financial performance. It is a series of leading and lagging steps where the effect of learning and growth and the organization's internal processes is the creation of innovative services and products that will provide for the needs of the consumers which in turn directly translates to financial gain. It is important to point that the internal process in the organization will have a direct impact on the customers and external consumers (Kaplan, 2004).

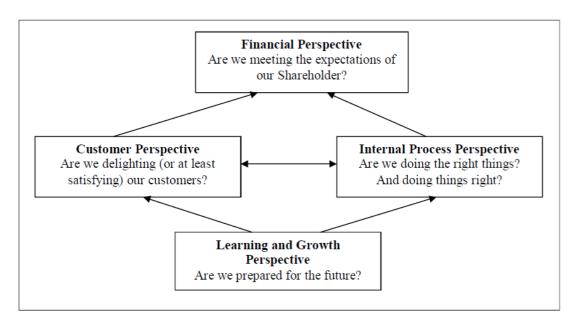


FIGURE 1
FOUR PERSPECTIVES OF BALANCED SCORECARD

According to Ronchetti (2006), as part of the organization's mission, it must take care of the customers since the increased or decreased profitability is proof of whether the financial strategy is effective or not. Customer satisfaction, on the other hand, is an indication that the internal process performance measurement system drives the organization to the customer value position. Kaplan & Norton (2001) noted that this is achievable by choosing customers

with the highest value propositions. Organizations should also be aggressive in innovating internal processes, products, and services to carry out a high value for the customers (Kaplan & Norton, 2004). But all these should start at the very core which is the learning and growth perspective where human resources, information, organization capital, culture, and teamwork lead the organization to create a tailored method for measurement (Chuang, 2007). According to Park & Gagnon (2006), learning and growth facilitate the performance of the other three perspectives, and that these three perspectives are greatly adopted by continuous improvements.

We argue that the traditional balanced scorecard strategy map will not perfectly suit educational institutions whose objectives are more than just financial gain alone but more of quality education and successful graduates.

#### **BSC** in Education

Most of the works of literature in the balanced scorecard are focused on Higher Educational Institutions. Amaratunga & Baldry (2000) were able to identify the connection between performance quality and performance measures after using the balanced scorecard model in the higher education industry.

It was also in 2000 when Sutherland (2000) applied the balanced scorecard strategy to monitor the success of the academic programs including its improvement plans. Cullen et al. (2003) suggested that instead of using the balanced scorecard approach to measure performance, organizations can review the principles behind performance management. The importance of using the balanced scorecard in education institutions was established when Papenhausen & Einstein (2006) surveyed a business college. The same concept was deliberated so that a common scenario can be established in the Indian sector (Umashankar & Dutta, 2007). In published research by Nayeri et al. (2008) in Iran, the authors evaluated the effective use of the balanced scorecard model by assigning it to the best Iranian business schools in the country. Each school created a more custom-built approach based on their goals and objectives and once realized, the results were used to compare the standing of each top business school.

The balance scorecard is now being utilized in primary educational institutions. Anastacio (2016) produces a mission-centered strategic management system for Paulinian schools using the Balanced Scorecard (BSC) approach. The resulting BSC model included five perspectives, namely, spirituality, internal processes, learner and external community, learning organization, and fiscal resources perspectives. Strategic objectives with the corresponding key performance indicators (KPIs) were identified. In the case of Gunduzalp & Arabacı (2017) that analyzed the opinions of managers, teachers, and inspectors towards the implementation of a balanced scorecard system in primary schools. The participants approved the implementation of the balanced scorecard and show the effectiveness in terms of specifying the school performance and development. In recent literature by Rompho (2020) developed and empirically tested the balanced scorecard for public schools in Thailand. The study was among the first to empirically test the relationships between perspectives in the balanced scorecard model for public schools. Additionally, the balanced scorecard can be a useful tool for non-managers who work in public schools.

The balanced scorecard was initially created to facilitate the delivery of financial performance. However, a balanced scorecard can also be used in academic institutions to evaluate its performance while still having a different long-term goal apart from financial gain. Aside from increasing profitability, the balanced scorecard strategy for educational institutions can be analyzed from a different mapping point of view. This is because educational

institutions, which are not for profit by nature, will have different relevant perspectives. This framework will be basing performance management on nonfinancial performance standpoints.

## **Key Performance Indicators and Organizational Growth**

Performance indicators have been used by many organizations to know if they are going in the right direction and if they are achieving their targets in terms of their targets (Bhatti, et al., 2014; Wu & Chen, 2012). Many schools are using these indicators in fostering quality education (Wu & Chen, 2012). One evidence for this is the study made by Bhatti et al. (2014) that confirms the positive impact of well-measured and monitored performance indicators in the overall performance of the organization through regression analysis. However, there was no data from their study that substantiated the school's overall performance impact over the learning and growth. Researchers became more inquisitive about the role of performance indicators on the growth of the school. Bramley (1994) provided some evidence of the effectiveness of the performance indicators. Although he claimed that at the time of his study, there was a nebulous boundary between performance indicators and effective school, he still found out that performance indicators become more effective when they are aligned with the school evaluation models. The adoption of a market theory of many educational organizations became the interest of Giersch et al. (2019) in their study. They confirmed that school performance against defined performance indicators becomes the basis for parents in selecting the school for their children. The researcher found out that track top the indicator being used to select the school followed by school proficiency score then school growth score in North Caroline, USA.

A well-developed KPI is indeed crucial to organization growth. Hadebe & Khumalo (2018) identified three sources of performance indicators in the school. These are reviews of related literature, interviews, and observations. At the time of research, these were also the sources by which the school in review derived some of their performance indicators. Hadebe & Khumalo (2018) also identified key issues that may boost school performance namely pursuing, monitoring, and maintaining. A thorough review of some effective key performance indicators has led to the identification of 28 KPIs in education. Ted (2021) identified 28 KPIs which are categorized into 9 areas as listed below:

## Academia

**Graduation Rate** 

Awards

Research Grants

Student Attendance Rate.

## **Finance**

Percentage of Student on Aid

**Grant Money** 

Tuition Cost.

#### **Ratios**

Student to Faculty Ratio

Student to Faculty Ratio

Cost per Student

Faculty to Administration Ratio

Number of Students Enrolled per number of applications

#### Curriculum

Percentage Students in Focus Areas Proficiency Rates for each Subject

## **Faculty**

Percentage of Faculty with advanced certifications or degrees Number of Training Sessions per year Faculty and Staff Attendance rates Faculty and Staff Retention Rates

#### **Facilities**

Average Age of Building Percentage of Buildings Passing Inspection Classroom utilization Rates

## **Technology**

Percentage of Classes using Technology Percentage of administrators using Technology Social Media Engagement Calls to Tech Department per month

### **Transportation**

Percentage of Students that take Public Transit Percentage of Students that commute Cost of Transit

### **Housing**

Percentage of Students living on campus

Percentage of Students that say on-campus housing is above average

On the other hand, there were 5 Key Performance Indicators identified by Emery (2014). It is worth noting that among these, some of which are also identified in the list of KPI by Jackson (2021) to which includes (a) student achievement, (b) discipline referrals, (c) attendance rates, (d) graduation rates and (e) teacher satisfaction. In the study made by Wu and Chen (2012), they found out three major dimensions, 10 measures, and 37 indicators. Among the 37 indicators, the top five indicators as perceived by the experts in Taiwan are learning achievement performance, parental satisfaction, physical fitness performance, school reputation, and school culture.

#### **METHODS**

A qualitative approach using a case study method is implied in the study. A case study permits the researchers to study the phenomenon where it is taking place like in a company, in a country, or even in the university (Creswell, 2007). As for this study, the school phenomenon in developing KPIs shall be used. Educational Action Research was also be designed in the exploration due to its iterative and cyclical process in defining the problems and issues and drawing potential strategies to address them (Brydon-Miller et al., 2017).

Edward Deming's PDSA (Plan-Do-Study-Act) was the model used to explore the question raised in this research. The PDSA cycle through the technical action research promotes a process of iteration of the current situation leading to planning, evaluating, and reflecting on school leaders' experience. The (Figure 2) below shows a nutshell of each step of the model.



FIGURE 2
PDSA FRAMEWORK FOR IMPROVEMENT (NHS ENGLAND AND NHS IMPROVEMENT, N. D.)

Qualitative research was employed as a design to determine whether or not the indicators registered in the school's BSC are relevant. Qualitative research seeks to understand the meaning of the word given by the people around it (Merriam & Tisdell, 2016). This allowed researchers to understand how the school leaders assigned a performance indicator in their BSC and reflect on their relevance making sure that they assigned strategic, supporting, and output indicators that impact positive school performance (Parmenter, 2007).

Furthermore, this method is used to understand organizational growth from the perspective of the school where the data was gathered. Two main methods were used to meet the goal of the research. These are documentary analyses and interviews.

The main document analyzed in this research is the current BSC of the school for the academic year 2020-2021 and two assurance reports based on the 2 inspection reports. The results of the findings were corroborated by an interview with the selected school staff. The corroboration and convergence of the findings were used to draw upon a framework to develop more biased-free measures.

## **Data Collection Instruments, Variables, and Materials**

Significant documents were secured in the process of answering the research questions. These were the school evaluation report which stipulates the school improvement priorities, the school BSC for the academic year 2020 - 2021, and minutes of the meeting during which the school team developed, communicated, monitored, analyzed, and interpreted their performance indicators. Below are descriptions of the documents reviewed.

**Balanced Score Card (BSC) for AY 2020 – 2021:** The school BSC is patterned after the Norton and Kaplan model which contains four perspectives namely finances, student (customer), processes, and learning & growth. Each perspective contains performance indicators categorized into two – the Key Performance Indicators (KPI) and Key Result Indicators (KRI). The Table 1 below shows the number of KPI and KRI monitored by the school.

Table 1 NUMBERS OF KRI AND KPI IN EACH PERSPECTIVE					
Perspectives	Perspectives Number of KPI Number of KRI				
Finance	3	7			
Student	6	12			

Process	10	37
Learning and Growth	3	10
Total	22	66

The BSC also contains the strategic goals patterned after their school mission and vision. Four strategic goals were identified in this document. Strategic maps are also available showing how the KPIs are integrated and associated with one another. The researcher particularly studied the performance indicators from this document and closely analyzed how the performance indicators match with the strategic goals and the inspection report.

**School Evaluation Report**. This document is the report released in 2018 which stipulated the summary of the findings of the school evaluation team who visited the school during the same academic year. This has the key findings of their visit as against the UAE Education Standards. The researcher particularly focused on the school-wide priority to improve the student outcome which was used as a criterion to assess the relevance of the performance indicators.

**Minutes of the Meeting**. Seven minutes of the meeting were reviewed to identify how the school leaders develop, communicate, monitor, analyze and interpret their performance indicators.

## **Data Analysis**

In identifying relevant performance indicators from the school's current BSC, the researchers used the Directed Content Analysis method to meet the research objectives. The content analysis provided a strategy to characterize the language used in the texts in reference to its contextual meaning. Specifically, this study employed the use of directed content analysis to identify relevant performance measures in the school BSC. Researchers use directed content analysis in a qualitative study in validating or extending a theoretical framework or a theory (Hsieh & Shanon, 2005). In the study, it is done using the deductive coding technique.

Coding is a process of identifying "segments of meaning" from the data and label them with a code. Since the data reviewed were made up of simple texts, the researchers highlighted the phrases and assigned codes for each phrase manually. Deductive coding was employed as the codes emerge from literature (Linneberg & Korsgaard, 2019). This research used the texts from the BSC and inspection report which are then triangulated by texts from the interview. The researcher assigned codes from the inspection report and match the code with the current performance indicators from BSC which indicates that it is relevant.

### **Research Procedure**

The flow of the research is patterned after the PDSA model of (Brydon-Miller, et al., 2017). Below is the Table 2 presenting the activities conducted by the researcher. The process of brainstorming and reflections implemented were iterative as supported by data analysis collection steps prescribed by Merriam & Tisdell (2016).

Table 2 RESEARCH PROCESS		
PDSA Stages	Activities	
PLAN	<ol> <li>Determined the prevalent issues concerning the performance indicators and their current impact on school operation</li> <li>Obtained permission to conduct the study and use the data for content analysis</li> </ol>	

	Table 2 RESEARCH PROCESS
PDSA Stages	Activities
	<ul> <li>Balanced Score Card Database for the school year 2020 – 2021</li> <li>School Evaluation Report 2018</li> </ul>
	<ul> <li>Minutes of the Meeting related to the development, monitoring, analyzing, and interpreting performance indicators</li> </ul>
	Identified school leaders are scheduled for an interview to support the findings of the research
	1. Transcribed the variables from the texts primarily the strategic goals and performance indicators from the BSC, improvement priorities from the school evaluation report, and some statements from the minutes of the meeting that supports the findings of the research.
DO	2. Tabulated the transcripts and coded them with more appropriate labels that can be used to measure performance. Three researchers were assigned to agree on the codes for each transcribed text.
	<ul><li>3. Read and re-read texts and made thorough reflections on the assigned codes to ensure the appropriateness of the codes assigned for the transcribed texts.</li><li>4. Matched the code with the related performance indicators.</li></ul>
	1. Reviewed the chosen performance indicators and confirmed their congruency through data triangulation via interview and content analysis with the texts from the minutes of the meeting
STUDY	2. Inferred the impacts of the performance indicators to the strategic goals and improvement priorities
	3. Identified codes that do not match any of the performance indicators listed in the database.
A COT	1. Drew implications of the performance indicators identified as relevant to the school performance when measuring and monitoring is done systematically
ACT	2. Decided on the plan of actions that could be adopted in developing, communicating, collecting, analyzing, and monitoring the performance indicators.

#### RESULTS AND DISCUSSION

Using the content analysis method when reviewing the documents, this research came up with the following data and information which are arranged based on the order of the research questions.

## Relevant Performance indicators from Strategic Goals and School Evaluation report

The tables presented in this part of the paper identifies the relevant performance indicators grouped into two - KPIs and KRIs. Code was also assigned for every strategic goal from the BSC and assurance statements from the school evaluation reports. The coding technique of qualitative research was used in this research.

With strategic goal 1 Table 3 of ensuring financial stability and profit in the next five years, Table 1 identifies the relevant indicators in the BSC report. All of which were aligned to Financial Stability. This strategic goal matches the finance perspective of the BSC with three KPIs and seven KRIs.

Table 3 STRATEGIC GOAL 1		
Code	Code KPI KRI	
Finance	Meet the	Student Population Registration of the current year
Stability	population targets	Student Registration of the upcoming academic year
	Maintain an appropriate	Increase savings through cost-cutting strategies

tuition cost throughout	Spend within the school budget
the year	
Maintain an appropriate	Administrators and Student Ratio
student-staff ratio	Support Staff and Student Ratio
(Inverse Interpretation)	Teacher and Student Ratio

When it comes to strategic goal 2 Table 4 which states the target to improve the core academic outcomes based on NAEM using the new educational delivery mode, five KPIs and 12 KRIs were identified as relevant from the BSC. The content analysis can be seen in the table shown on the succeeding page.

Ahmad & Kim Soon (2015) tells the funds generated from student fees can only be increased when the customers are satisfied based on the universities' reputation and quality of service offered. In efforts to support financial sustainability, fulfilling the interest of stakeholders is seen as means to the objective of expanding earning and deduction of cost. Wahba (2016) states that Financial Management "through managing the reduction in expenses by using suitable financial policies and practices. Full planning to the financial situation can lead to improving the financial structure which in turn will be reflected in the educational services rendered, salaries which lead to an increase in the satisfaction level for both employees and students. As Niven (2002) stated financial perspective is important because it gives the results of all other perspectives of customer, internal processes and innovation, and learning, and also that without this perspective the other perspectives can fail to take place, as this perspective is about financing the others.

	Table 4 STRATEGIC GOAL 2				
Code	KPI	KRI			
Student	Increase student attendance rating	Student Attendance Rating			
Achievement	Increase the student attainment in external	Attainment rating in			
	assessment	• TIMSS			
		• PISA			
		• MAP			
		• IBT			
	Meet the student attainment target in internal	Student Attainment in success criteria across			
	assessment	the subjects			
	Meet the student progress expectations in	Progress rating in			
	external assessment	• TIMSS			
		• PISA			
		• MAP			
		• IBT			
	Ensure SOD students are showing achievement	Progress Rating of SOD students			
	against the criterion				
	Meet the student progress expectations in	Student Progress in success criteria across the			
	internal assessment	subjects			

With respect to the strategic goal 3 Table 5 of the school targeting well-equipped teachers and staff in the delivery and implementation of the Blended Education, it identifies three relevant KPIs and 10 KRIs. These match with the learning and growth perspective of the BSC and all of which are aligned with the target.

Literature suggests that student achievement stresses that class attendance is related to better performance. Zhou et al. found that students with higher GPAs attended classes at a higher rate. Moreover, compared to low-performing students, they were also found to be more

likely to arrive late to class. Standardized achievement tests are relatively easy to understand and interpret. There is much less known, however, about how students' backgrounds, motivation, interests, instruction, school climate, and numerous other factors influence academic achievement (Alexander, 2000).

	Table 5 STRATEGIC GOAL 3			
Code	KPI	KRI		
Learning and	Raise the quality of the PD provided	Teachers are satisfied with the quality and frequency		
Growth	to teachers and staff	of PD sessions they receive (Overall)		
		PD Assessment Ratings		
		Satisfaction Rating in the delivery of the PD		
	Increase the performance level of	Evaluation Ratings of the Support staff		
	teachers	<ul> <li>Evaluation Ratings of the Teachers</li> </ul>		
		<ul> <li>Evaluation Ratings of the Administrators</li> </ul>		
		Teacher Observation Ratings (Termly)		
		<ul> <li>Learning Climate Ratings of the Teacher</li> </ul>		
	Enhance the educational capacity to	Learning Walk Ratings		
	deliver high-quality education	Learning Climate Ratings		

Strategic goal 4 Table 6 is all aligned with the internal perspective of the school's BSC. 10 KPIs and 37 KRIs are aligned with this. The internal perspective has the greatest number of KPIs and KRIs as compared to other perspectives of the BSC. Based on Biden et al. (2014), the goals of the internal business process perspective is to develop an integrated program for degrees, revise administrative support and committee structure, and also maintain the latest curriculum. In addition, Thomas (2007) considered training and development of human resources, developing an institution's knowledge culture, an institution's involvement in research as some of the measures of innovation and learning. The Faculty will gain the benefit through human capital development; skills, talents and knowledge, capital, information; information systems and networks and organizational capital; organization's ability to sustain the changes necessary to achieve the objectives Ahmad & Kim Soon (2015). Wahba shares that it can become the motivating force for the previous three perspectives in achieving excellent performance. The function of this perspective is to construct a complete set of core techniques and abilities to promote the previous three perspectives. With the rapid developments in information technology, competition in the education market has become increasingly intense. Once the needs of the customers have been obtained, institutions convert these requirements into activities that can process them into tangible output that customers can use.

	Table 6 STRATEGIC GOAL 4			
Code KPI KRI				
Internal Processes	Meet the requirements for local and internal accreditation	<ul> <li>Meet the local inspection requirements</li> <li>Meet the international inspection requirements</li> </ul>		
	Increase number of staff with Ministry approval	<ul><li>Teachers with Ministry Approval</li><li>Administrators and Staff with Ministry Approval</li></ul>		
	Maintain a high staff engagement	<ul> <li>Faculty and staff attendance rating</li> <li>Faculty and staff Retention ratings</li> </ul>		
	Maintain a high facility usage throughout the academic year	<ul><li>Facility Utilization Ratings</li><li>Classroom Utilization Rate</li></ul>		

Increase student satisfaction in the educational delivery  Increase the promotion of student wellbeing	<ul> <li>Students / Parents across grade levels can access the instructional plan and resources in the platform</li> <li>Students receive additional support to meet their needs</li> <li>Stakeholders (students) are satisfied with the operation of the prescribed delivery mode.</li> <li>Students participate in activities that promote well-being.</li> <li>Students are happy and feel energetic in the class.</li> <li>Students are aware of who to contact in school when being bullied during online classes</li> <li>Students know the safety measures when online</li> <li>Students feel like they can manage their school-related stress well</li> </ul>
Increase parent satisfaction in the educational delivery	<ul> <li>Students / Parents across grade levels can access the instructional plan and resources in the platform</li> <li>Parents can communicate with their respective teachers</li> <li>Parents are satisfied with how quickly and efficiently their complaints are addressed</li> <li>Parents are satisfied with the quality and conduct of classes</li> <li>Stakeholders (parents) are satisfied with the operation of the prescribed delivery mode.</li> </ul>
Increase efficiency in addressing the needs of the parents	<ul> <li>Received parents complaints are addressed efficiently</li> <li>Parents are satisfied with how quickly and efficiently their complaints are addressed</li> <li>Parents have a high extent of support in the delivery of educational modes at school (online learning)</li> <li>Parents have a high extent of support in the delivery of educational modes at school (hybrid learning)</li> <li>Stakeholders (parents - online learning) are satisfied with the operation of the prescribed delivery mode.</li> <li>Stakeholders (parents - hybrid learning) are satisfied with the operation of the prescribed delivery mode.</li> </ul>
Increase staff satisfaction in the operation of the educational delivery	<ul> <li>Teachers feel like they can manage the school-related stress well</li> <li>Stakeholders (teachers) are satisfied with the operation of the prescribed delivery mode.</li> </ul>
Increase technology engagement	<ul> <li>The teachers can use technology effectively in the delivery of teaching</li> <li>Percentage of Classes Using Technology</li> <li>Email Engagement Ratings (Active Users)</li> <li>Engagement Rating of Exact Path</li> <li>Engagement Rating of MS Team across the class</li> <li>Class Dojo Engagement Ratings</li> <li>Engagement Rating of the Use of Seesaw</li> <li>Percentage of Administrators engaged with technology</li> </ul>

The succeeding table presents the relevant performance indicators that match with the school inspection report. There are three categories taken from the evaluation report that require the school to improve on namely- student achievement, teaching and assessment, and leadership and management. With a content analysis of the priority for improvement in student achievement Table 7 the researchers identified two relevant codes tagged under the inspection note - attainment and progress. In the attainment code, three KPIs and five KRIs are labeled as relevant to meeting the improvement priority. There was no KRI to monitor the attainment of the SOD students against the criterion. On the other hand, the progress code has also slightly more KRIs than in attainment. The institution must first ensure that it meets the current and future

needs of customers Wahba (2016). Biden et al. (2014) stated the goals of the internal business process perspective are to develop an integrated program for degrees, revise administrative support and committee structure, and also maintain the latest curriculum. Dorweiler & Yakhou (2005) claimed that good internal processes in an academic institution lead to, among other things, quality of educational services and efficiency. On the other hand, Chen et al. (2006) measured internal processes from two perspectives, namely quality service process and complete teaching facilities.

Table 7 STUDENT ACHIEVEMENT				
Texts from the Inspection Report	Code	KPI	KRI	
Improve achievement and learning skills by:  • Developing mathematical reasoning in all areas of phases 2, 3, and 4 and their ability to solve mathematical problems • Developing students' English literacy skills to enhance their progress in core subjects • Improving students' abilities to think critically and enhancing their skills in enquiry and research	Attainment  Progress	Meet student attainment in internal assessments.	Attainment in success criteria across the subject.	
		Increase student attainment in external assessment	Attainment rating in	
		Ensure SOD students are showing achievement against the criterion	(No corresponding KRI from the BSC)	
		Meet the student progress expectation in student assessments.	Student progress in success criteria across the subject.	
		Increase the student progress in external assessment	Progress rating in  TIMSS PISA MAP IBT	
		Ensure SOD students are showing achievement against the criterion	Progress Rating of SOD students	

Lesson Delivery, Learning Capacity, and Lesson planning are the codes assigned from the inspection report under the teaching and assessment Table 8. Lesson Delivery and learning capacity have one KRI. The previous has one KPI while the latter has two KRI that match with it. Lesson Planning has no assigned KRI and KPI under the BSC report

Table 8 TEACHING AND ASSESSMENT			
Texts from the Inspection Report	Code	KPI	KRI

Improve the impact of teaching and assessment on achievement	Lesson Delivery	No corresponding KPI from the BSC	No corresponding KRI from the BSC
<ul> <li>Focusing more on lessons upon developing students' subject and learning skills.</li> </ul>			
Using a wider range of teaching strategies to fully engage and meet the needs of all the students	Learning capacity	Enhance the educational capacity to deliver high-quality education	<ul> <li>Learning Walk         Ratings     </li> <li>Learning Climate         Ratings     </li> </ul>
Using assessment information in lesson planning	Lesson Planning	(No corresponding KPI from the BSC)	(No corresponding KRI from the BSC)

Lastly, leadership and management Table 9 have three codes identified from the four improvement priorities namely governing body, Continuing Professional Development (CPD), performance monitoring. CPD has two relevant KPIs tagged but both have no corresponding KRIs. The governing body and performance monitoring have neither KPIs nor KRIs. This should be addressed in the next academic year to ensure that improvement priorities aligned with these have specific interventions to assure relevance.

Table 9 LEADERSHIP AND MANAGEMENT				
Texts from the Inspection Report	Code	KPI	KRI	
Improve the impact of leadership and management on student outcomes by:  • Ensuring the effectiveness of the school's governance arrangement	Governing Body	(No corresponding KPI from the BSC)	(No corresponding KRI from the BSC)	
Ensuring that all leaders and staff have a realistic understanding of how assessment data should be used to provide better-personalized learning in lessons	Continuing Professional Development (CPD)	Raise the quality of the PD provided to teachers and staff	(No corresponding KRI from the BSC)	
Holding subject leaders more accountable for students' and school's performance	Performance Monitoring	(No corresponding KPI from the BSC)	(No corresponding KRI from the BSC)	
<ul> <li>Targeting professional training for teachers on the aspects of teaching and learning identified as weaknesses</li> </ul>	CPD	Raise the quality of the PD provided to teachers and staff	(No corresponding KRI from the BSC)	

## **Suggested Performance Indicators to Promote School Growth**

From the table presented previously, the researchers were able to identify missing indicators on some aspects of the evaluation report which has a bearing on the school performance. The following are performance indicators that need to be looked into:

- 1. The KPI of "ensuring SOD students are showing achievement against the criterion" with an attainment code under student achievement must have a corresponding KRI.
  - 2. Lesson delivery and lesson planning codes under the teaching and assessment of the

school evaluation report must have their corresponding KPIs and KRIs. Researchers have not seen any performance indicators aligned with the school BSC.

3. The codes of the governing body and performance monitoring which are tagged from the leadership and management must have their corresponding KPIs and KRIs. The KPI of the CPD which states "raise the quality of the PD provided to teachers and staff" must have its corresponding KRI.

Those items identified above may implications on the school performance. The absence of the complementarity between KRI and KPI would result in a gap in performance monitoring in the organization (Parmenter, 2007). School leaders will have limited capacity to focus on aspects of organizational performance that are most critical for school success.

#### CONCLUSION AND RECOMMENDATIONS

Two important conclusions can be generated from this research. First, all the performance indicators in the school's BSC are aligned with the strategic goals and evaluation report. Some performance indicators, either stated as KRI or KPI, are main and supportive. Second, there are few from the evaluation report with missing performance indicators. These are the factors that influence SOD learning achievement, lesson delivery, and planning, governing body, and performance monitoring by the school subject leaders. When not addressed, educational delivery may have an impact on learning equity between regular students versus those who have special needs, internal locus of performance in the classroom via the teacher's quality planning and delivery of the lessons, involvement of the entire aspects of the stakeholders such as the governing body who plays a very vital role in the school overseeing of strategic leadership and accountability, and most importantly the significant role of the subject leaders to promote quality of education on its ground level. It is highly recommended to identify relevant and adequate numbers of performance indicators based on the factors stated above which stem out from the evaluation report to ensure success. It is worth also considering a review of other indicators that support the main to shore out the organizational performance. Importantly, the entire school stakeholders must be fully aware of the performance indicators for a better buy-in of the initiatives and allow other school leaders to create a unique indicator to further support quality performance other than those identified as common.

## **REFERENCES**

- Ahmad, A. R., & Soon, N. K. (2015, August). Balanced scorecard in higher education institutions: what should be consider?. In 2015 International Symposium on Technology Management and Emerging Technologies (ISTMET) (pp. 64-68). IEEE.
- Al-Hosaini, F. F., & Sofian, S. (2015). A review of balanced scorecard framework in higher education institution (HEIs). *International Review of Management and Marketing*, *5*(1), 26.
- Amaratunga, D., & Baldry, D. (2000). Assessment of facilities management performance in higher education properties. *Facilities*.
- Anastacio, S. E. L. (2016). Balanced scorecard model for Paulinian educational institutions. *International Journal of Curriculum and Instruction*, 8(1), 69-89.
- Bhatti, M. I., Awan, H. M., & Razaq, Z. (2014). The key performance indicators (KPIs) and their impact on overall organizational performance. *Quality & Quantity*, 48(6), 3127-3143.
- Brydon-Miller, M., Prudente, M., & Aguja, S. (2017). Educational Action Research as Transformative Practice. SAGE Knowledge. SAGE Publications Ltd.
- Chen, S. H., Yang, C. C., & Shiau, J. Y. (2006). The application of balanced scorecard in the performance evaluation of higher education. *The TQM magazine*.
- Chuang, M. (2007). The Balanced Scorecard: Creating a management system for private technical universities in Taiwan. Spalding University.

- Creswell, J. (2007). What is Case Study Research? Sage Publishing.
- Cullen, J., Joyce, J., Hassall, T., & Broadbent, M. (2003). Quality in higher education: from monitoring to management. *Quality Assurance in Education*.
- Davis, F. R. (2005). Strategic Management: Concepts and cases. NJ: Prentice-Hall.
- Dorweiler, V. P., & Yakhou, M. (2005). Scorecard for academic administration performance on the campus. *Managerial Auditing Journal*.
- Emery, Debbie (2014). 5 Key Indicators of School Performance. Flippen Group. Available from https://flippengroup.com/5-key-indicators-school-performance-2.
- Giersch, J., Bottia, M. C., Stearns, E., Mickelson, R. A., & Moller, S. (2019). The Predictive Role of School Performance Indicators on Students' College Achievement. *Educational Policy*, 0895904819857827.
- Gunduzalp, S., & Arabacı, I. B. (2017). Applicability of Balanced Scorecard system in primary schools according to opinions of education inspectors, managers and teachers. *European Journal of Education Studies*.
- Hadebe, L. B., & Khumalo, R. (2018). Assessing Key Performance Indicators in Government Secondary Schools of Matabeleland Region in Zimbabwe. *International Journal of Education and Practice*, 6(2), 84-106.
- Jackson, C., Wilson, V., McCance, T., & Alomari, A. (2021). Flourishing People, Families and Communities. *International Practice Development in Health and Social Care*, 237-250.
- Kaplan, R. S., Robert, N. P. D. K. S., Kaplan, R. S., & Norton, D. P. (2001). *The strategy-focused organization: How balanced scorecard companies thrive in the new business environment*. Harvard Business Press.
- Kaplan, R. S., Kaplan, R. E., Norton, D. P., Davenport, T. H., & Norton, D. P. (2004). *Strategy maps: Converting intangible assets into tangible outcomes*. Harvard Business Press.
- Kaplan, R. S. (2004). Strategy maps: Converting intangible assets into tangible outcomes: Harvard Business Press.
- Kaplan, R. S., & Norton, D. P. (2001). Transforming the balanced scorecard from performance measurement to strategic management: Part II. *Accounting horizons*, 15(2), 147-160.
- Koumpouros, Y. (2013). Balanced scorecard: application in the general panarcadian hospital of tripolis, Greece. *International journal of health care quality assurance*.
- Linneberg, M. S., & Korsgaard, S. (2019). Coding qualitative data: A synthesis guiding the novice. *Qualitative research journal*.
- Nayeri, M. D., Mashhadi, M. M., & Mohajeri, K. (2008). Universities strategic evaluation using balanced scorecard. *World Academy of Science, Engineering and Technology*, 37(1), 332-334.
- Niven, P. (n.d.). Balanced Scorecard Step-By-Step Maximizing Performance and Maintaining Results Second Edition. Retrieved August 13, 2020, from http://www.vra.com/vralibrary/ebooks/Balanced\_Scorecard\_Step\_by\_Step.pdf.
- Park, J. A., & Gagnon, G. B. (2006). A causal relationship between the balanced scorecard perspectives. *Journal of Human Resources in Hospitality & Tourism*, 5(2), 91-116.
- Papenhausen, C., & Einstein, W. (2006). Implementing the Balanced Scorecard at a college of business. *Measuring Business Excellence*.
- Parmenter, David (2007). Key Performance Indicators. John Wiley & Sons, Inc.
- Pelayo, R. (2021). Parent Satisfaction Report. Al Itgan American School 3-6
- NHS. (2021). Plan, Do, Study, Act (PDSA) cycles and the model for improvement Online library of Quality, Service Improvement and Redesign tools NHS England and NHS Improvement.
- Rapoport, J., Teres, D., Zhao, Y., & Lemeshow, S. (2003). Length of stay data as a guide to hospital economic performance for ICU patients. *Medical care*, 386-397.
- Rompho, N. (2020). The balanced scorecard for school management: Case study of Thai public schools. *Measuring Business Excellence*.
- Ronchetti, J. L. (2006). An integrated Balanced Scorecard strategic planning model for nonprofit organizations. *Journal of practical consulting*, 1(1), 25-35.
- Şencan, H., & Karabulut, A. T. (2015). Monitoring of educational performance indicators in higher education: A comparison of perceptions. *Educational Sciences: Theory & Practice*, 15(2).
- Sutherland, T. (2000). Designing and implementing an academic scorecard. *Accounting Education News*, 15, 11-15.
- Thomas, H. (2007). Business school strategy and the metrics for success. *Journal of Management Development*. The Impact of COVID-19 on Education Recommendations and Opportunities for Ukraine. (n.d.). World Bank. Available from https://www.worldbank.org/en/news/opinion/2021/04/02/the-impact-of-covid-19-on-education-recommendations-and-opportunities-for-ukraine
- Umashankar, V., & Dutta, K. (2007). Balanced scorecards in managing higher education institutions: an Indian perspective. *International Journal of Educational Management*.
- Wahba, M. (2016). Balanced Scorecard in Higher Education Applied case study on "Arab Academy for Science. *Technology and Maritime Transport*, 1-30.

Wu, H. Y. (2012). Constructing a strategy map for banking institutions with key performance indicators of the balanced scorecard. *Evaluation and program planning*, *35*(3), 303-320.