

Model of Excellent Educational Systems: Qualitative Data Analysis

ABSTRACT

The educational system must be transformed to fulfill its promise of providing quality education and excellent service for all. In measuring its quality, it is vital to consider valid indicators to determine whether it has achieved its goals and objectives. Without indicators, it will be difficult to assess its performance and plan for improvement. Thus, this paper explored the various literature on best educational systems to list indicators and create a model of an excellent educational system. Based on the qualitative data analysis, four indicators emerged for the excellent educational system: context indicators, input indicators, process indicators, and output indicators. Context indicators pertain to the interrelated conditions, environment, or setting that affect educational operations. These include student characteristics, socio-economic conditions, cultural aspects, status of the teaching profession, and local community issues. Meanwhile, input indicators are resources like material, amount, energy, and power that are put in to carry out operations, activities, or events. These inputs or resources involve financial, material, and human resources that influence the success of an educational system. On the other hand, process indicators include how specific educational processes are conducted in practice like the application of standards, teaching quality, time on task, school climate, and educational leadership. Lastly, output indicators are things that are produced out of an educational action or effort. These reveal how the education system is performing in terms of subject knowledge, competencies, repetition, progression and completion rates, and employer satisfaction. Further, these indicators are described as amiable context, adequate input, appropriate process, and acceptable output to achieve the best educational system. The absence of one indicator may affect other indicators as these indicators need one another to complete an educational system. Therefore, educational leaders are encouraged to focus on the improvement of these indicators to achieve an excellent educational system. Teachers and stakeholders can also support the administrators in realizing these indicators.

Keywords: Education, excellent, indicators, system

1. INTRODUCTION

Education is a basic human right and the foundation for peace and sustainable development. It has long played a foundational role in the transformation of human societies. However, there is no such thing as “perfect” education. The pressing need to reimagine how to improve education means that it is not yet fulfilling its promise to help people shape peaceful, just, and sustainable futures. Hence, education itself must be transformed (UNESCO, 2021).

In transforming education, it is vital to examine its system. The way it operates significantly contributes to its excellence in delivering quality education. In measuring quality, the Organization for Economic Cooperation and Development (OECD) offers a rich, comparable, and up-to-date array of indicators that reflect a consensus among professionals on how to measure the current state of education internationally. The indicators provide information on the human and financial resources invested in education, how education and learning systems operate and evolve, and the returns to investments in education (OECD, 2021).

Speaking of “indicators”, these refer to things, trends, or facts that indicate the state or level of something (Merriam-Webster). The concept of indicators is not new since it already existed even before. In the context

of education, these are statistics that describe key aspects of schooling that permit the evaluation and monitoring of schools, teachers, programs, and students. However, it is critical to validate the appropriateness of indicators in measuring the quality of an educational system. Hence, it is important to formulate a feasible set of indicators through certain criteria or standards to ensure validity (Creemers & Kyriakides, 2010).

The value of determining appropriate indicators in measuring quality is greatly appreciated in education. In fact, the world leaders gathered last September 2015 to set ambitious goals for the future of the global community. The fourth goal of the Sustainable Development Goals (SDGs) seeks to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. Each target of the SDG 4 framework has at least one global indicator and a number of related thematic indicators designed to complement the analysis and the measurement of the target (OECD, 2021).

Additionally, the United Nations Educational, Scientific and Cultural Organization (UNESCO) oversees the education SDG agenda in the context of the United Nations SDG framework. The UNESCO Institute of Statistics (UIS) is also coordinating global efforts to develop the indicator framework to monitor progress towards SDG 4 targets. In addition to collecting data, the UIS works with partners to develop new indicators, statistical approaches, and monitoring tools to better assess progress across the education-related SDG targets (OECD, 2021).

The above-mentioned instances in the quest for appropriate indicators convey the relevance of indicators in measuring an excellent educational system. The success of an educational system depends upon the quality and performance of these indicators. However, it is needed to identify first and understand indicators better to realize these in an educational system. Hence, this paper aims to systematically analyze the indicators of an excellent educational system based on various sources. Each indicator has components or sub-indicators that greatly influence the success of an educational system. The main objective is to create a model of an excellent educational system as an inspiration for improving educational system.

2. METHODOLOGY

This paper adhered to the systematic process of collecting and analyzing data for qualitative analysis. First, the author did a Google search using the keywords “best educational systems” and related phrases. Then, she listed the factors of an excellent educational system as well as the components of these factors. She also read the required reading materials which were found in the prescribed class Google Drive. In reading the materials, she applied strategies like previewing, scanning, and skimming until she grasped the essence of the materials. Using varied sources, she grouped together similar factors and analyzed each factor comprehensively.

2.1 Data Analysis

Given the findings and reviews from different studies and reviews, the author carefully analyzed the data. Using the table that contained indicators of an excellent educational system with respective components, the author employed “semantic analysis” to clearly define each term and discuss it accordingly using her own cluster of criteria which she listed and identified. With these strategies, the author was able to come up with her model of excellent educational systems. She also described each indicator by putting specific adjective to it. This model served as the basis for writing conclusions and recommendations for application.

3. ANALYSIS AND DISCUSSION

INDICATORS OF AN EXCELLENT EDUCATIONAL SYSTEM

Based on the comprehensive review of the articles, four indicators emerged for the excellent educational system: *context indicators*, *input indicators*, *process indicators*, and *output indicators*. According to UNESCO IIEP Learning Portal (2020), these indicators are used in analyzing educational systems and measuring educational quality. Figure 1 presents the different indicators for the excellent educational system.

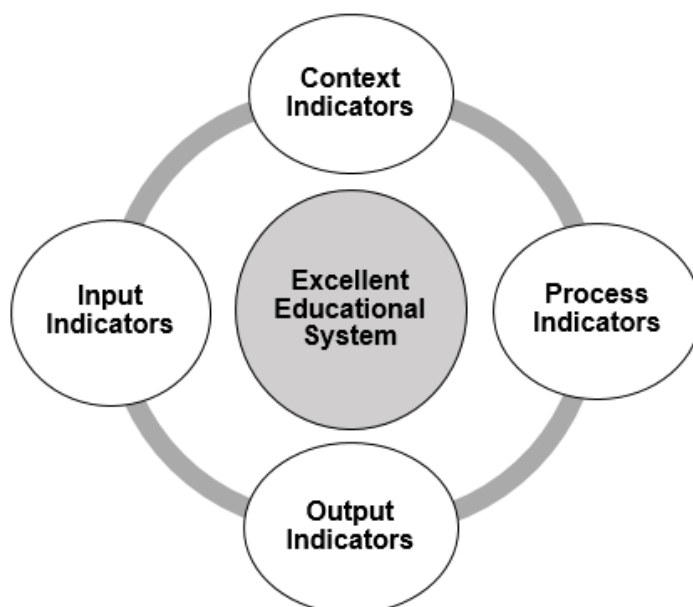


Figure 1. Indicators for the excellent educational system

3.1 CONTEXT INDICATORS

Semantically, the word “context” refers to the interrelated conditions in which something exists or occurs. It also describes the environment or setting in which a certain thing or activity is implemented. Thus, it covers some factors within an environment that affect operations of events. In understanding the success of a certain implementation, it is vital to study or consider the context.

In the world education, there are some context indicators that affect its implementation or management. These contextual factors include *student characteristics*, *socio- economic conditions*, *cultural aspects*, *status of the teaching profession*, and *local community issues* (UNESCO IIEP Learning Portal, 2020)). These sub-indicators make up the entire context of an educational system which may determine its success.

Similarly, Ginsburg and Smith (2014) illustrated the structure for contextual variables. It publicized that context indicators involve student factors, school factors, community factors, instructional content and practice, and community factors. Undeniably, these indicators contribute to the excellence of educational system. Thus, it encouraged educators to consider past variables or conditions that measure important characteristics of schooling and pay careful attention to variables that may be altered by circumstances as these affect the school context.

To evaluate or measure the success of context indicators, educators may utilize common data-collection tools like surveys, classroom observations, inspection reports, and self-evaluations. However, context indicators are often challenging to develop and measure as they concern qualitative issues.

Given the significant role and influence of context in education, it can be considered as one of the indicators of an excellent educational system. Proper and good student characteristics, socio- economic conditions,

cultural aspects, status of the teaching profession, and local community issues contribute to the improvement of educational system. The impact of these factors in the educational setting brings success in achieving educational goals and objectives. Table 1 presents the context indicators to achieve an excellent educational system.

Table 1. Context Indicators of an Excellent Educational System

Indicators of Excellent Educational System	Sub-indicators	Measurement
Context Indicators	Student Characteristics	Surveys, Classroom Observations, Inspection Reports, and Self-Evaluations
	Socio- Economic Conditions	
	Cultural Aspects	
	Teaching Profession Status	
	Local Community Issues	

3.1.1 Student Characteristics

This context indicator refers to the personal and academic background of the students that significantly contribute to their learning process. Personal traits involve gender, language, age, and cultural background. On the other hand, academic characteristics consist logic, objectivity, intellect, insight, and practical applications. These elements bring impact on how and what students learn. Understanding their characteristics promote excellence in educational system since it encourages educators to suit their teaching strategies according to the types of students they have. Thus, it enables students to be more efficient and effective in their learning (TOP HAT Glossary, 2023).

Indeed, student characteristics are a central driver for student engagement. These characteristics influence teachers' behavior, teachers' need to monitor their students' engagement, and the need to make inferences with regard to their underlying characteristics that affect their learning. Specifically, student characteristics comprise both cognitive and motivational-affective components. In order to improve students' learning, it is good to determine their characteristics to guide the teachers on how to treat students accordingly. With this, educational system will be improved (Seidel et al., 2020).

On the same vein, Brandmiller et al. (2020) claimed that student characteristics can influence teacher perceptions of students' cognitive skills. These can also influence teacher perceptions of motivation and behavior. These characteristics involved students' socio-economic status, immigrant background, and gender. It is important to examine students' characteristics to understand them better and adjust the teaching-learning activities based on their context.

Further, Orji and Vassileva (2022) revealed that student characteristics affect their willingness and ability to acquire new knowledge. Being able to automatically model student characteristics during learning processes is essential for dynamic and continuous adaptation of teaching and learning to each student's needs. Some of the characteristics include student learning motivation, engagement, affective states, and the likes. Detecting the characteristics can contribute to supporting and presenting personalized learning content and activities to students. Therefore, student characteristic is one of the context indicators towards achieving an excellent educational system.

3.1.2 Socio-Economic Conditions

This contextual factor pertains to the social and economic status of the school that influence its management and implementation. According to Ginsburg and Smith (2014), socio-economic condition or status revolves around three factors: family income and possessions, educational attainment of parents, and parental occupational status. These factors significantly affect excellence in educational system since parents' influence on their students' education is relevant.

In addition, Satti and Jamil (2021) broadcast that social and economic factors affect students' dropout rate. Specifically, household economic condition is a notable factor in reducing dropouts. If the economic condition of a household is better off than before, then there is less chance of the child to dropout from school. Similarly, the economic situation of the community where the household resides also affects dropouts. If the community's economic situation is better than before, then it reduces the chance of child dropout.

Generally, socio-economic condition is a factor in measuring the quality of education. In fact, Abenawe (2022) defined this as the level of education, income, and professionalism of an individual or group. It also encompasses income, occupation, education, neighborhood, and political power which all affect educational operations. To prove further, findings of the researcher's study showed that there was a positive significant relationship between socio-economic status and quality of education in secondary schools in Ibanda District. Thus, socio-economic condition influences the nations' educational quality as a whole.

3.1.3 Cultural Aspects

According to Collins Dictionary, the word "cultural" refers to a particular society, including its ideas, customs, and art. On the other hand, the term "aspect" pertains to something that is one of the parts of its character or nature. Similarly, Cambridge Dictionary defined "culture" as the way of life, especially the general customs and beliefs of a particular group of people, while "aspect" means that one is part of a situation or problem.

Relating the above-mentioned definitions of cultural aspect in education, it refers to the schools' customs, culture, ideas, and the way of operations which all describe its context. These cultural aspects significantly contribute to educational system since these influence the way a school manages or implements educational activities. School leaders' actions, teachers' attitude, and students' behavior depend upon the kind of culture they have in their school. Hence, educators should establish good cultural aspects in the school by demonstrating a culture of competence, respect, cooperation, unity, efficiency, honesty, diligence, and prudence. By establishing good customs, all elements of educational system will follow.

3.1.4 Teaching Profession Status

This context indicator refers to the condition of teachers' work in the school. According to Kasapoğlu (2020), teaching profession status is essential because it can affect teachers' perspective on the profession, motivation levels, and professional disciplines. Hence, the researcher aimed to investigate the changes in the teaching profession from past to present, the factors affecting the change in the status, and solutions to increase the teaching profession status. Results revealed that there were really changes of teaching profession status from past to present. Teachers expressed that some factors affecting change involved the policies followed by the system, the value of teachers in society, the loss of prestige, and the low income of teachers. Thus, it was suggested that teachers should conduct a wider range of research and take measures to improve their status levels using different methods.

Exploring the teaching profession status, Kahraman and Çelik (2020) aimed to determine teachers' perceptions about their professional status. Results showed that teachers evaluate the concept of professional status in the context of social and economic conditions. They conveyed that there were factors influencing their status such as personal rights, admission requirements, autonomy, and the private lives of professionals. Although the teachers' perceptions about the respectability of the profession are positive, their perceptions about the status of the profession are negative. They believed that the status of the profession has changed negatively with the changes in society, politics, and teacher context from past to

present. They added that parents' and students' behaviors towards teachers, professional, organizational and personal factors, teacher education and appointment system, socio-economic conditions, and social perception affect the status of their teaching profession. Thus, teachers believed that it was vital to improve professionalism, social, economic rights, and social perception to increase the status of their teaching profession.

Generally, it is relevant to consider the teaching profession status as one of the context indicators in achieving an excellent educational system. Understanding more their status could help educators design activities, generate sound decision, and adjust actions.

3.1.5 Local Community Issues

This context indicator pertains to issues that are happening in the community where the school is located. Community plays a vital role in improving educational systems. Hence, the issues exist within the community can affect the schools located within it. According to Mkhabela (2019), a school that has strong relations with the community is most likely to flourish. The school in this regard is perceived as a public asset to be cherished and supported by all in the feeder community. Since education is one of the public goods, it must be valued by the community and the people. It is also beneficial to protect or preserve this. This is the responsibility of all community role players, stakeholders as well as educational institutions.

Community can help schools achieve excellence in educational system. Community partners share a common interest in the students' education. They are experts in their fields and can share their knowledge with the students and the school. Through these partnerships, long-term reciprocal relationships can develop. Community partners can become co-educators and partners in education. They can help the school in implementing various school activities. Thus, having good local community issues can influence an excellent educational system.

3.2 INPUT INDICATORS

Technically, the word “input” pertains to something that is put in. It is the act or process of putting in a certain material, amount, energy, and power in order to carry out operations, activities, or events. Hence, it is necessary to have sufficient inputs and appropriate allocation of these to do a certain thing successfully.

In the context of education, input indicator is vital in managing and implementing teaching-learning activities. Without something to put in, education will not take place. Input indicator basically measures the deployment and use of resources to facilitate learning. These inputs or resources involve *financial, material,* and *human resources* that influence the success of an educational system (UNESCO IIEP Learning Portal, 2020).

Similarly, OECD (2021) also conveyed the importance of inputs or resources invested in education. These input indicators involved financial resources (money), human resources (teachers and school staff), and physical resources (buildings and infrastructure) which all help in achieving excellent educational systems.

To monitor the utilization of the above-mentioned resources, input indicators reveal whether the planned financial, material, and human resources are being delivered in the planned quantities, at all levels of the system. Fortunately, information on input indicators is relatively easy to obtain since inputs are often “countable” by nature. In fact, management processes involve keeping records of many inputs automatically. The only challenge lies on the differences between producing inputs and ensuring that they are available at the endpoint.

With the significant contribution of input in executing educational operations, it can be considered as one of the indicators of an excellent educational system. Adequate and proper utilization of inputs such as financial, material, and human resources contribute to the progress of educational systems. Therefore, schools should make sure that input indicators are planned accordingly to obtain an excellent educational system. Table 2 presents the input indicators to achieve an excellent educational system.

Table 2. Input Indicators of an Excellent Educational System

Indicators of Excellent Educational System	Sub-indicators	Measurement
Input Indicators	Financial Resources	Countable Management Processes and Input Records
	Material Resources	
	Human Resources	

3.2.1 Financial Resources

This input indicator refers to the funds and assets that finance an organization's activities and investments. Thus, these keep business operating. Organizations can do several ways to raise funds and utilize financial resources effectively to achieve an excellent system. In the context of education, financial resources are vital in purchasing resources to deliver teaching-learning activities.

In measuring financial resources, Jackson (2023) broadcast some ways to calculate these. Educators can look into the percentage of students on aid by calculating the number of students receiving some kind of financial assistance, like scholarship money or government aid. In a secondary school, they may also track those on meal assistance. Additionally, it is also important to track the fundraised money for an institution through endowments, donations, or partnerships to better understand the allocation of financial resources.

3.2.2 Material Resources

Basically, this input indicator refers to facilities and physical assets like textbooks, visual aids, charts, maps, laboratories equipment, chalkboard/ whiteboard, playground, laboratories, libraries, instructional tools, writing materials, classrooms, and other materials applicable in education system. These resources are vital in the teaching and learning process since these are used by educational institutions in the process of implementing educational activities. They also act as ancillaries for the achievement of educational goals and objectives. Hence, these are considered as the integral part of a well-organized and excellent school system (Osuji & Iheanyichukwu, 2021).

Even previous studies showed that resources undeniably influence the goal attainment of public secondary schools. Hence, it is necessary to examine leaders' resource management skill. Findings of the study conducted by Okon et al. (2020) confirmed this since resource management has a partial significant relationship with goal attainment in secondary schools. Thus, they also discussed relevant policy implications in which principals should effectively and prudently utilize available material resources as well as internally generated funds for judicious purposes to achieve educational goals.

In measuring the achievement of educational goals, the 2018 Philippine PISA (Programme for International Student Assessment) data reveal salient variations in academic achievement that happen between schools and among students. However, the Philippines' participation in the PISA presented an opportunity to investigate a representative sample of 15-year-old students, and the various factors associated with their achievement. Material resources can be one of the factors that influence students' PISA achievement (Trinidad, 2020).

Furthermore, Ibrahim et al. (2021) conveyed that resources can provide a significant relationship to teachers' job satisfaction. These can help teachers cope with their workload. Agreeably, previous studies also stated that the resources can alleviate teachers' stress. Correspondingly, findings of their study revealed that resource element is an important factor in task management. Researchers also agreed that adequate resources could prevent teachers' workloads from occurring. Therefore, it can be stated that the resource element is very important in managing tasks well and achieving an excellent educational system.

Without material resources, teachers unable to enjoy teaching, which in turn affect students' learning and educational system in general.

3.2.3 Human Resources

Human resources refer to assets or people working together in an organization to achieve a common goal. In the context of education, human resources contribute a significant role in conducting institutional activities as they perform their duties and functions. Hence, human resource management is a very important aspect in the education process (Tanjung, 2020). Definitely, the way how schools manage their resources will affect their achievement. They have to consider that competent human resources are the most important capital for schools to develop school organizations, including schools at the basic education level (Gunawan et al., 2020).

Similarly, Qutni et al. (2021) revealed that one of the important areas in education management is related to human resources such as teachers and administrative personnel. Indeed, human resource management is vital in improving the quality of education. The same way, education quality can also determine the quality of the people in an organization. In fact, the quality of human resources can give an edge from one organization to another.

Moreover, Hermawan et al. (2021) as cited in Wehrmeyer (2017) added that good human resources can serve as company assets because its success depends upon the quality of employees. Organizational personnel who deliver high-quality work have a beneficial impact on their co-workers and the institution as a whole. Hence, schools should make sure that human resources must be qualified and competent to achieve an excellent educational system.

3.3 PROCESS INDICATORS

Basically, the word "process" refers to a series of actions or operations leading to an end. It also pertains to something that is going on. Since it is happening, it is marked by gradual changes that lead toward a particular result. Hence, it describes the way or manner of doing things in order to achieve certain goals.

In the context of education, process indicators are vital as these measure how educational program activities were conducted. These indicators monitor whether school activities were carried out to the desired standard of quality or not. Process indicators include how specific educational processes are conducted in practice like the *application of standards, teaching quality, time on task, school climate, and educational leadership* (UNESCO IIEP Learning Portal, 2020)).

Process indicators also concern qualitative issues. Hence, these indicators may be obtained through surveys, pedagogical observations, inspection reports, and self-evaluations. Good and proper application of standards, teaching quality, time on task, school climate, and educational leadership bring positive impact to an educational system.

The mentioned features of process indicators convey their significance as indicators of an excellent educational system. The manner or the process of how schools apply standards or rules, teach with quality, do tasks on time, maintain positive school climate, and exhibit leadership can bring excellence in the educational system. Therefore, it is beneficial to consider process indicators in aiming for educational success. Table 3 shows the process indicators to obtain an excellent educational system.

Table 3. Process Indicators of an Excellent Educational System

Indicators of Excellent Educational System	Sub-indicators	Measurement
Process Indicators	Application of Standards	Surveys and Pedagogical Observations, Inspection Reports, and Self-Evaluations
	Teaching Quality	
	Time on Task	
	School Climate	
	Educational Leadership	

3.3.1 Application of Standards

This process indicator pertains to the enforcement of rules and guidelines in implementing programs. Abiding to the prescribed orders and memoranda can contribute excellence in educational system. With this, schools are guided with the appropriate practices and systematic ways in achieving educational goals. According to Ginsburg and Smith (2014), some standards include student-centered approach, aligned rigorous content, teaching for understanding, and adjustment for student learning differences which all promote excellence in educational system.

With the aim to apply standards, the Department of Education continues to drive improvements to teaching quality with new standards for school leaders. It encourages school heads and supervisors to improve teacher quality with the issuance of two landmark education policies that set professional standards for the country's school leaders. In fact, it issued DO 24, s. 2020 or the National Adoption and Implementation of the Philippine Professional Standards for School Heads (PPSSH) and DO 25, s. 2020 or the National Adoption and Implementation of the Philippine Professional Standards for Supervisors (PPSS). These instances explicitly show that DepEd is very particular with the application of standards to improve educational system.

Acknowledging more the value of standard application, the University of Massachusetts Amherst (2022) defined standard as a document that provides requirements, specifications, guidelines or characteristics that can be used consistently to ensure that materials, products, processes and services are fit for their purpose. Following standards is vital to provide a common language to measure and evaluate performance. It also frames, guides, and normalizes almost all areas of organization. Similarly, British Standards Institution (2023) shared that application of standards is important as it lets organizations fine-tune performance and manage the risks while operating in more efficient and sustainable ways. Lastly, it helps individuals see how to embed best practice into an organization.

3.3.2 Teaching Quality

Teaching quality refers to teachers' credentials and perspectives that they bring to the classroom like the instructional strategies that they use. Ginsburg and Smith (2014) broadcast that teaching quality is composed of teachers' knowledge of academic content, teachers' mindset or disposition, and teacher experience. These variables significantly influence success in education since teachers are considered as drivers of the teaching-learning process. Whatever the activities they implement inside the classroom and how they treat students could bring impact to the success of an educational system.

Exploring more the quality of teaching, Graham et al. (2020) as cited in Pianta and Hamre (2009) stated that teaching quality involves a range of teaching practices that make a positive contribution to students' emotional, behavioral, and academic outcomes. This teaching quality is evident in their observed classroom behaviors in areas of classroom management, social support for students, and instruction. In measuring the quality, educators can reflect on student performance in standardized assessments.

However, quality teaching is a controversial term that raised debates among the scholars. They said that quality teaching can never be totally grasped and appraised since the issue of measuring quality teaching is highly crucial. Sadly, the choice of valid indicators to assess the quality of teaching is not yet standardized and is still challenging (Baghdadi, 2021).

The challenge in measuring teaching quality is also confirmed by Lindgreen et al. (2022) who reasoned out that each instructor brings his/her training, experience, style, and capabilities to the classroom, making it notoriously difficult to establish a fair teaching quality metric. Hence, there is a need for a better technique to identify each instructor's strengths on teaching-related activities, as well as places for improvement. With this, it can be noted that teaching quality also covers teachers' training, experience, style, and capabilities which all contribute excellence in educational system.

Generally, teaching quality is one of the most important topics in the field of education because of the significant impact that it brings to student achievement. In fact, various studies have shown that teacher quality is the single most important school-related factor in student achievement. Teaching quality involves multiple factors, such as teacher's instructional strategies, classroom environment, and the quality of the student's learning outcomes. In understanding this further, it is important to consider the teacher's ability to create a positive learning environment, engaging instruction, and effective assessment of student learning. It is believed that a high-quality teacher should be able to create a classroom climate that allows for active student engagement and promote critical thinking (Tikrity, 2023). Therefore, teaching quality is a good indicator of an excellent educational system.

3.3.3 Time on Task

This is defined as the time a student spends actively engaged in a learning task. It has been suggested that increasing students' time-on-task could lead to improved learning results. Hence, time on task correlates with students' performance and schools' performance as well. Predicting students' future success can allow instructors to proactively deploy interventions to help struggling students. Therefore, time-on-task is one key contributor to learning (Leinonen et al, 2022).

According to the time on-task hypothesis, the amount of time an individual devotes to an instructional task determines the extent to which learning occurs. Therefore, time off-task hampers learning by limiting learning opportunities. Prior research has generally found a positive relationship between time on-task and achievement. Overall, on-task behavior was positively correlated with learning, controlling for gender, school type, and grade-level. Hence, educators should consider the role of time on task in the process of delivering educational programs and activities (Godwin et al., 2021).

3.3.4 School Climate

This process indicator refers to the general features of the school like school facilities, instructional resources, surrounding neighborhood, policies that shape curriculum standards, class size, compensation, culture, and interpersonal environment that influence educational activities. According to Ginsburg and Smith (2014), it also includes school safety, teacher expectations for students, student absenteeism (not excessive), teacher support for one another, principal, and mindset.

According to Ryberg et al. (2020) as cited in Thapa et al. (2013), school climate broadly refers to the quality of multiple facets of a school's environment to support student learning. In fact, the U.S. Department of Education's School Climate Survey (EDSCLS) measures this through its three domains such as engagement, safety, and environment. The schools, districts, and states are increasingly recognizing the need to improve school climate to promote the academic, social, and emotional well-being of students. Given the significant role of school climate in learning, it can be considered as an indicator of excellent educational system.

School climate is really an indicator of excellent educational system as it can support or hinder effective instruction and teachers' professional growth. It consists of organizational features such as supportive

leadership, teacher collaboration, high expectations for students, and a collective commitment to support student learning. Moreover, strong professional environments foster a virtuous cycle in which teachers develop skills faster, stay at a school longer, and improve student learning year (Kraft & Falken, 2020).

Further, positive school climate significantly contributes to educational system as it lets students feel a sense of safety and belonging. Besides, this improves students' academic achievement, test scores, grades, and engagement. It also helps in reducing the negative effects of poverty on academic achievement. Thus, schools should promote good school environment by creating school and classroom structures that cultivate knowledge, skills, and beliefs, which in turn build educators' understanding of student needs and their ability to support learning and development. Generally, it is important for educators to gain the knowledge, skills, and attitudes to meet their students' needs (Darling-Hammond & DePaoli, 2020).

3.3.5 Educational Leadership

This process indicator pertains to the process of guiding and leading the conduct of educational activities to achieve educational goals. It also encompasses the act of uniting the educational key players towards collaborative work to obtain common good. Hence, it is vital in an educational system.

Exploring the impact of educational leadership in education system, Tian and Huber (2020) examined the development of educational leadership, administration, and management research by identifying thematic strands that hallmark key publications. Findings revealed five thematic strands: school leadership for enhancing students' academic achievement and teachers' effectiveness; leadership for educational change, accountability and promoting democratic values; leadership for social justice, equal education and narrowing achievement gaps; principal's instructional leadership for school improvement; and distributed leadership and its impact on organizational climate and teachers' attitudes and stress. Given the results, it can be noted that educational leadership is a vital indicator of an excellent educational system.

Moreover, Pannell and Sergi-McBrayer (2020) conveyed that the role of principal as an educational leader has evolved from the keeper of the keys, chiefly responsible for building maintenance and discipline, to one of the integral keys to student success. Nowadays, principals are responsible for a multitude of areas that impact the achievement of all students including curriculum planning and supervision, managing funds, ensuring legislative compliance, implementing reforms, and most notably, instructional leadership. These roles implied that they played significant part in achieving an excellent educational system.

In performing educational leadership, leaders encountered a lot of factors that influence their leadership skills since each school differed in geographic and cultural context. Findings of the study publicized that leaders in schools adjust their actions and methods based on the surrounding cultural impact. Thus, educational leaders need to understand these potential impacts if they work in culturally diverse communities (Fisher, 2021).

Further, the importance of educational leadership in schools is evident in many aspects. In fact, many scholars have found in recent research that a transformational educational leadership approach has a beneficial connection with members' engagement. When staff are engaged, they are likely to perform better in an organization. Thus, they can contribute significant impact in educational system (Asefa & Kant, 2022).

3.4 OUTPUT INDICATORS

In terms of definition, the word "output" means something that is produced out of an action or effort. It also refers to the act or process of producing a desired product, material, amount, power, and energy in a given time. Hence, it generally pertains to the things produced by a person, machine, or industry based on objectives.

In the context of education, output indicators determine the outcomes or effects of educational activities to see whether the program objectives were attained. Output indicators reveal how the education system is

performing in terms of *subject knowledge, competencies, repetition, progression and completion rates, and employer satisfaction* (UNESCO IIEP Learning Portal, 2020). Hence, schools must look into the improvement and success of these factors.

The measurement of output indicators may be obtained through national examinations, international assessments, surveys, and systematic field observations. Output indicators typically involve measurement of learning outcomes based on national examinations or international assessments. Moreover, OECD (2021) publicized that output indicators analyze the characteristics or qualities of the graduates such as their educational attainment.

Similarly, the productivity view conveyed that the success of a system depends upon the attainment of its aspired outputs or outcomes. According to this view, output indicators are predominant or even the only type of quality indicators that need to be monitored (Scheerens, 2004). Hence, educators should pay attention to the improvement of output indicators as these affect educational systems.

Given the various impacts of output indicators in education, these are considered as important indicators in achieving an excellent educational system. These provide the most important data for understanding whether educational quality and learning outcomes are improving as intended. Table 4 presents the output indicators to obtain an excellent educational system.

Table 4. Output Indicators of an Excellent Educational System

Indicators of Excellent Educational System	Sub-indicators	Measurement
Output Indicators	Subject Knowledge	National Examinations, International Assessments, Surveys, and Systematic Field Observations
	Competencies	
	Repetition Rate	
	Progression and Completion Rates	
	Employer Satisfaction	

3.4.1 Subject Knowledge

This indicator refers to students' range of information or understanding through schooling. Hence, this can be considered as educational output which can significantly contribute to educational system. This is the reason why there are lots examinations that measure students' subject knowledge. Results from these examinations reflect success or failure in educational system. However, there are some factors that also affect subject knowledge.

Speaking of factors affecting subject knowledge, Jacob et al. (2020) conveyed that teacher quality is an important factor in determining gains in students' achievement. Teacher's knowledge matters most in producing students' learning outcomes. Hence, teachers are expected to process and evaluate new knowledge relevant for their core professional practice and to regularly update their profession's knowledge base. After all, subject knowledge measures schools' efficiency.

3.4.2 Competencies

According to the National Institutes of Health (2023), competencies are the knowledge, skills, abilities, and behaviors that contribute to individual and organizational performance. Knowledge is information developed or learned through experience, study, or investigation. Meanwhile, skill is the result of repeatedly applying knowledge, while ability is an innate potential to perform mental and physical actions or tasks. On

the other hand, behavior is the observable reaction of an individual to a certain situation. The target proficiency level for each competency will vary based on an individual's position and the organization's needs.

In addition, Cambridge Dictionary defined competencies as important skills that are needed to do a job. On the same vein, IGI Global associated these to a capacity to respond to individual or societal demands in order to perform an activity or complete a given task. They are developed through acting and interacting in both formal and informal educational or professional contexts, and require going beyond the mere reproduction of acquired knowledge.

Given the various definitions of competencies, these can be assets in improving educational system. These serve as educational outputs since these are developed by the learners, teachers, and personnel in the conduct of the teaching-learning process. Generally, competencies are school's output indicators which can influence an educational system.

3.4.3 Repetition Rate

This is one of the performance indicators that determine the magnitude of learners who repeat a grade level. This can be computed by grade level and average per grade level. A high repetition rate implies high wastage of resources (DepEd Quezon, 2022). Hence, this can be considered as one of the indicators of excellent educational system.

Similarly, the UNESCO Institute for Statistics (2023) describes repetition rate as the proportion of learners from a cohort enrolled in a given grade at a given school year who study in the same grade in the following school year. Data can be gained from school register or school census for data on enrolment and repeaters by grade. Ideally, repetition rate should approach zero percent. High repetition rate reveals problems in the internal efficiency of the educational system and possibly reflect a poor level of instruction. When compared across grades, the patterns can indicate specific grades for which there is higher repetition, hence requiring more in depth study of causes and possible remedies. Generally, this serves as one of the output indicators that influence an excellent educational system

3.4.4 Progression and Completion Rates

Progression rate looks at the pace that students are on to complete their degree while completion rate calculates the number of enrolled students who have completed their degree program divided by the total number of students who have completed their degree program, withdrawn, or cancelled it (Newlane University, 2019). These indicators can serve as assets in achieving excellent educational system.

In addition, Jackson (2023) stated that completion or graduation rate determines the number of students who completed their schooling or received a particular certificate or degree within the normal time frame. This data can represent school's success in providing quality education to students.

3.4.5 Employer Satisfaction

This output indicator refers to the fulfillment of a need or want by a person or company that provides a job. It also indicates the employer's state of being satisfied to the employee (Merriam-Webster). Truly, this means that employers are satisfied with the employees' qualities, which are influenced by the schools that mold them to be satisfactory ones. Hence, schools are part of their qualities. Employer's satisfaction can be an indicator in saying that a certain educational system is excellent.

The importance of employer satisfaction as one of the bases of an excellent educational system is evident even in the previous times up to the present. According to Shah and Nair (2011), employers are one of the most important stakeholders of schools. However, there was limited research in Australia on employer satisfaction with the quality of university graduates and on the key capabilities of early career graduates for employers in various professions. Such research is critical as governments in many countries are enhancing quality assurance of higher education with a focus on academic standards and the extent to

which students have achieved learning outcomes. Hence, the researchers examined the employer's views about the key skills and attributes needed in early career graduates to meet changing industry trends in various professions.

Given the points above, it can be noted that employer satisfaction can serve as reflection for educational institutions to assess the quality of their graduates. In assessing the competence of the graduates, it is relevant to consider the desired qualities of the employer and establish these qualities in the teaching-learning process. Once the employer is satisfied, the school's reputation will be affected by obtaining an effective and excellent educational system.

DESCRIBING AN EXCELLENT EDUCATIONAL SYSTEM (CLASS A MODEL)

After the analysis and discussion of the indicators of the educational system, it is good to add some adjectives that describe indicators of an excellent educational system. These indicators indeed complete an educational system, but they do not guarantee "excellence" without description. To achieve excellence, educational systems must have the "Class A Model" which stands for **A**miable Context, **A**dequate Input, **A**ppropriate Process, and **A**cceptable Output. I named this model "Class A" because of the meaningful adjectives that start with letter "A" which ranks first in the alphabets.

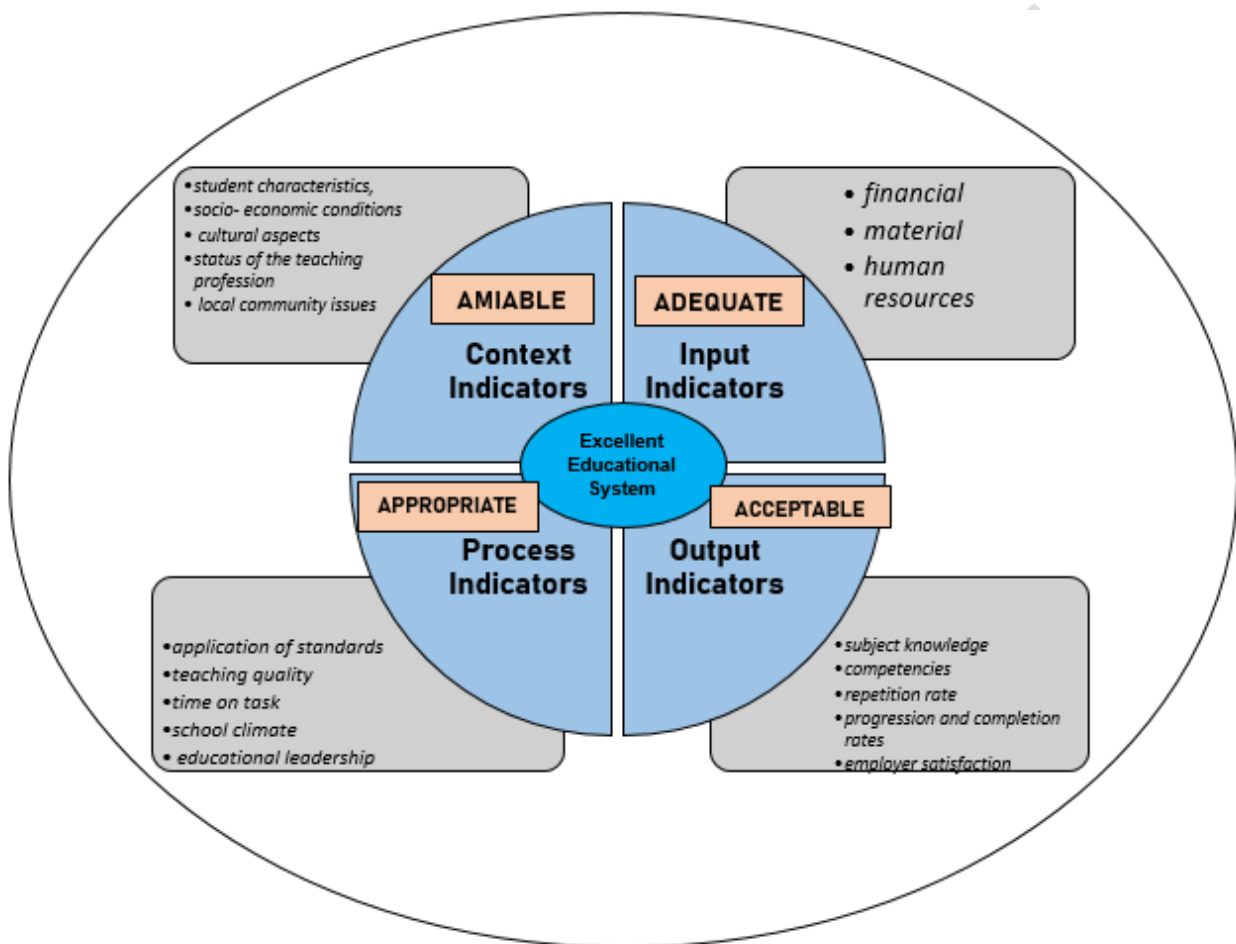
The word "**amiable**" means friendly, sociable, and admirable. It perfectly describes a good context to promote supportive and pleasant educational context for teaching-learning process to take place effectively. Having amiable *student characteristics, socio- economic conditions, cultural aspects, status of the teaching profession, and local community issues* can achieve an excellent educational system.

Another important factor of an excellent educational system is an "Adequate Input". The word "**adequate**" refers to sufficient or good enough for a specific need or requirement. It is significant to have adequate financial, material, and human resources to implement educational activities effectively. Having sufficient resources can also aid the teaching and learning process towards an excellent educational system.

Moreover, an excellent educational system needs Appropriate Process. The adjective "**appropriate**" means that a certain thing is suitable or compatible. Executing an appropriate manner of conducting educational programs and activities is an asset of educational system to succeed. Learning how to conduct educational processes appropriately through *application of standards, teaching quality, time on task, school climate, and educational leadership* can greatly contribute excellence in educational system.

Finally, educational systems should also aim for Acceptable Output. The word “**acceptable**” means capable or worthy of being accepted since it meets a certain standard. Acceptable *subject knowledge, competencies, repetition, progression and completion rates, and employer satisfaction* can obtain an excellent educational system. Achieving certain standards through these acceptable outputs is an evidence that a specific educational system is achieving its goals and objectives. Figure 2 shows my Class A Model of Excellent Educational System.

Figure 2. “My Class A Model of Excellent Educational System”



4. CONCLUSION

This paper aimed to systematically analyze the indicators of excellent educational system based on various sources. Each indicator has components or sub-indicators that greatly influence the success of an educational system. The main objective is to create a model of an excellent educational system.

Based on the qualitative data analysis, four indicators emerged for the excellent educational system: *context indicators, input indicators, process indicators, and output indicators*. **Context indicators** pertain to the interrelated conditions, environment, or setting that affect educational operations. These context indicators include *student characteristics, socio- economic conditions, cultural aspects, status of the teaching profession, and local community issues*. These sub-indicators make up the entire context of an educational system which may determine its success.

Meanwhile, **input indicators** are resources like material, amount, energy, and power that are put in to carry out operations, activities, or events. Hence, it is necessary to have sufficient inputs and appropriate allocation of these to do a certain thing successfully. Without something to put in, education will not take place. Input indicator basically measures the deployment and use of resources to facilitate learning. These inputs or resources involve *financial, material, and human resources* that influence the success of an educational system.

On the other hand, **process indicators** refer to a series of actions or operations leading to an end. These also describe the way or manner of implementing programs and activities in order to achieve educational goals. Process indicators are vital as these measure how educational program activities were conducted. These indicators monitor whether school activities were carried out to the desired standard of quality or not. Process indicators include how specific educational processes are conducted in practice like the *application of standards, teaching quality, time on task, school climate, and educational leadership*.

Lastly, **output indicators** are things that are produced out of an educational action or effort. These also refer to the act or process of producing a desired product, material, amount, power, and energy in a given time which determine the outcomes or effects of educational activities to see whether the program objectives were attained. Output indicators reveal how the education system is performing in terms of *subject knowledge, competencies, repetition, progression and completion rates, and employer satisfaction*. Hence, schools must look into the improvement and success of these factors.

Generally, these indicators are vital in measuring the success of an educational system. **Amiable Context, Adequate Input, Appropriate Process, and Acceptable Output** indicators must go together to implement educational programs and activities smoothly and effectively. The absence of one indicator may affect other indicators as these indicators need one another to complete an educational system. Hopefully, if all these indicators are adequate and good, it will be easier to achieve an excellent educational system.

5. RECOMMENDATIONS

Based on the various sources, this paper identified four indicators for excellent educational system such as *context indicators, input indicators, process indicators, and output indicators* with their respective sub-indicators. These findings expressed the importance of measuring the quality of an educational system with these standards.

Given the importance of **Amiable Context, Adequate Input, Appropriate Process, and Acceptable Output** in achieving an excellent educational system, it is vital for educational key players to focus and improve aspects of these indicators. Specifically, educational leaders are encouraged to design and implement activities based on these indicators. They should ensure that these indicators are all present in the educational system since the absence of one indicator will hinder other operations. They can assess the context indicators of an educational system by analyzing *student characteristics, socio-economic conditions, cultural aspects, status of the teaching profession, and local community issues*. After the analysis, they can plan solutions or interventions to overcome contextual challenges. They can also adjust their activities according to the current context to better understand educational aspects.

Aside from focusing on the context indicators, it is also relevant to examine the input indicators in governing an educational system. It is good for administrators to equip themselves with resource management in terms of *financial, material, and human resources*. They must have sufficient knowledge in understanding and managing these resources to achieve an excellent educational system. They must also be resourceful and prudent in handling financial and material resources. Further, it is also essential to establish professionalism and respect among human resources.

Considering the context and input indicators is not enough in achieving an excellent educational system. Educational leaders should also take into account the process by examining how specific educational processes are conducted in practice like the *application of standards, teaching quality, time on*

task, school climate, and educational leadership. These aspects are vital to better understand the flow of educational operations and adjust with these appropriately.

Further, they must consider output indicators like *subject knowledge, competencies, repetition, progression and completion rates, and employer satisfaction.* These are essential components of an educational system that leaders must focus on. They can improve these indicators by improving the curriculum to better respond to the current needs. They can also enhance criteria in measuring the performance indicators.

To support educational leaders in enforcing the indicators of an excellent educational system, teachers also play a vital role in translating educational visions into reality since they are closer to the field. They must also equip themselves with context, input, process, and output indicators through continuing professional development. With sufficient knowledge of these indicators, they can better apply these in the teaching profession. As teachers, they must adjust their teaching strategies with the educational context, learn about the inputs, understand the educational processes, and help the school in achieving good output by teaching with competence and passion.

Finally, stakeholders like parents, LGU officials, and work immersion partners can also help the schools in implementing educational activities through their social, financial, and moral support. They play a vital role in the context of an educational system, most especially in the aspects of *socio-economic conditions, cultural aspects, and local community issues.* In terms of input indicators, they can support the school by providing financial assistance to shoulder material resources and even human resource by assigning a Local School Board Teacher to aid school needs. Moreover, they can also improve educational process by helping the schools establish good school climate. Lastly, they can do something in improving output indicators like competencies and employer satisfaction. Generally, all educational key players involved in practicing amiable context, adequate input, appropriate process, and acceptable output achieve an excellent educational system.

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