THEORETICAL AND CONCEPTUAL FOUNDATIONS OF MEASURING THE QUALITY OF SECONDARY EDUCATION: A SYSTEMATIC LITERATURE REVIEW

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O'RTA TA'LIM SIFATINI O'LCHISHNING NAZARIY VA KONTEPTUAL ASOSLARI: TIZIMLI ADABIYOTLARNI SHARHLASH

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ТЕОРЕТИЧЕСКИЕ И КОНЦЕПТУАЛЬНЫЕ ОСНОВЫ ИЗМЕРЕНИЯ КАЧЕСТВА СРЕДНЕГО ОБРАЗОВАНИЯ: СИСТЕМАТИЧЕСКИЙ ОБЗОР ЛИТЕРАТУРЫ

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Abstract. Purpose – The aim of this paper is to present the main findings of the studies in the field of measuring quality of secondary education. Allocating these findings into numerous topics, in turn, grouping these findings into broad categories along with prioritizing outcomes of themes are also aims of this review paper.

Design – A systematic literature review (SLR) of articles focusing on measuring quality of learning outcomes in secondary schools was carried out based on major publishers, namely Science Direct, Springer Link, Sage Publishing and Online, Taylor and Francis, Emerald Online. In total, 30 articles published in several Scopus indexed Journals during 1990-2020 were collected. The affinity diagram was applied in order to group the findings of school quality measurement studies into logical categories.

Findings – A majority of articles focusing on measuring quality of schools in secondary education (MQSE) have been published over the last two decades. The findings of the MQSE studies in the 30 reviewed articles are grouped into 5 broad categories, namely learners' characteristics, contextual characteristics, teachers, input measurement and output measurement. The analysis also reveals topics than can be characterized as 'fundamental' and 'valuable'.

Practical Implications – Researchers and educational institutions can take into consideration the findings of MQSE studies in evaluating efficiency and quality of learning outcomes across schools.

Originality – This is the first paper reviewing and presenting analytically the findings of measuring quality studies in secondary education. This study also contributes to the literature by formulating meaningful and structural measurement proxies for school evaluation.

Key words: secondary education, learning outcomes, quality of schools, measuring quality of education, SLE, table, teacher, socioeconomic background.

Annotatsiya. Maqsad - Ushbu maqolaning maqsadi o'rta ta'lim sifatini o'lchash sohasidagi tadqiqotlarning asosiy natijalarini taqdim etishdir. Ushbu topilmalarni ko'plab mavzularga ajratish, o'z navbatida, ushbu topilmalarni keng toifalarga guruhlash va mavzular natijalarini ustuvorlashtirish ham ushbu maqolaning maqsadi hisoblanadi.

Usul - O'rta maktablarda ta'lim natijalari sifatini o'lchashga qaratilgan

maqolalarning tizimli adabiyotlar tahlili (SLR) yirik nashriyotlar, xususan Science Direct, Springer Link, Sage Publishing va Online, Taylor and Frensis, Emerald Online asosida amalga oshirildi. Hammasi bo'lib 1990-2020 yillar davomida bir nechta Scopus indekslangan jurnallarida chop etilgan 30 ta maqola ko'rib chiqildi va o'rganildi. Affinity (yaqinglik) diagrammasi maktab sifatini o'lchash tadqiqotlari natijalarini mantiqiy toifalarga guruhlash uchun qo'llanildi.

Natijalar - O'rta ta'lim maktablari (MQSE) sifatini o'lchashga qaratilgan maqolalarning aksariyati so'nggi yigirma yil ichida nashr etilgan. Ko'rib chiqilgan 30 ta maqoladagi MQSE tadqiqotlari natijalari 5 ta keng toifaga, ya'ni o'quvchilarning xususiyatlari, kontekstual xususiyatlar, o'qituvchilar, kirish o'lchovi va chiqish o'lchovi bo'yicha guruhlangan. Tahlil shuningdek, «asosiy» va «qimmatli» sifatida tavsiflanishi mumkin bo'lgan mavzularni ham ochib beradi.

Amaliy natijalar - Tadqiqotchilar va ta'lim muassasalari maktablar bo'ylab ta'lim natijalarining samaradorligi va sifatini baholashda MQSE tadqiqotlari natijalarini hisobga olishlari mumkin.

Originallik - Bu o'rta ta'limda sifatni o'lchash natijalarini tahliliy ko'rib chiqadigan va taqdim etadigan birinchi maqola. Ushbu tadqiqot, shuningdek, maktabni baholash uchun mazmunli va tizimli o'lchov proksilarini shakllantirish orqali adabiyotga hissa qo'shadi.

Kalit so'zlar: o'rta ta'lim, o'quv natijalari, maktablar sifati, ta'lim sifatini o'lchash, SLE, o'qituvchi, ijtimoiy-iqtisodiy ma'lumot.

Аннотация. Цель - Целью данной статьи является представление основных результатов исследований в области измерения качества среднего образования. Распределение этих результатов по многочисленным темам, в свою очередь, группировка этих результатов по широким категориям наряду с определением приоритетности результатов тем также являются целями этого обзорного документа.

Дизайн – систематический обзор литературы (SLR) статей, посвященных измерению качества результатов обучения в средних школах, был проведен на основе данных крупных издательств, а именно Science Direct, Springer Link, Sage Publishing and Online, Taylor and Francis, Emerald Online. Всего было собрано 30 статей, опубликованных в нескольких индексируемых Scopus журналах за период 1990-2020 гг. Диаграмма подобия была применена для того, чтобы сгруппировать результаты исследований по измерению качества школ в логические категории.

Выводы - Большинство статей, посвященных измерению качества школ среднего образования (MQSE), были опубликованы за последние два десятилетия. Результаты исследований MQSE в 30 рассмотренных статьях сгруппированы в 5 широких категорий, а именно характеристики учащихся, контекстуальные характеристики, учителя, измерение входных данных и измерение выходных данных. Анализ также выявляет темы, которые можно охарактеризовать как «фундаментальные» и «ценные».

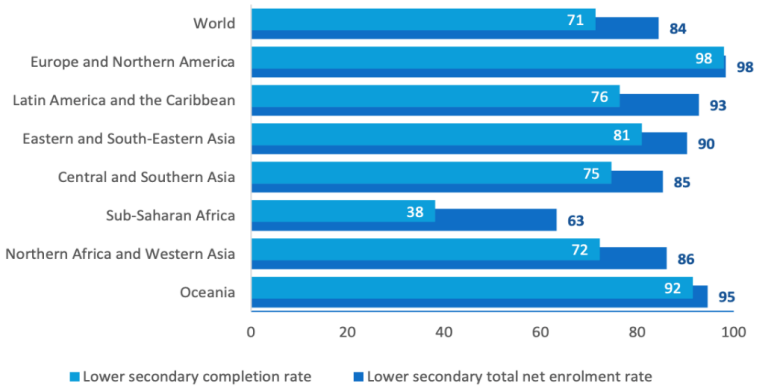
Практические последствия - Исследователи и образовательные учреждения могут учитывать результаты исследований MQSE при оценке эффективности и качества результатов обучения в школах.

Оригинальность - Это первая статья, в которой рассматриваются и аналитически представляются результаты измерения качества обучения в среднем образовании. Это исследование также вносит свой вклад в литературу, формулируя значимые и структурные прокси измерения для школьной оценки.

Ключевые слова: среднее образование, результаты обучения, качество школ, измерение качества образования, SLE, учитель, социально-экономическое положение.

Introduction. A nation's ability to develop over the years - its ability to innovate, advance real purchasing power, and reduce income inequality – is highly connected to the quality of education, therefore, it has been classified as one of the priorities of the United Nations' Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development. Goal Four of the United Nations Sustainable Development Goals (SGDs) concentrates on ensuring inclusive and equitable education quality and promotion of life-long learning opportunities for all with the aim of achieving effective learning outcomes. Thus, quality of learning outcomes brings long-term economic growth and enhances well-being of individuals in nations (Hanushek and Woessmann, 2007; 2010). Thus, the role of secondary education in strengthening the efficiency and intellectual resilience of human capital in nation is important and huge. It is widely recognized that the purpose of education is to stimulate learning and assist individuals gain knowledge and develop cognitive and reading skills that can consequently enable them acquire better jobs not only to survive, but also to thrive. Hence, skills and intellectual capital are essential to improve productivity, incomes and access to employment opportunities, in turn, it leads nations to be sufficiently integrated with competitive and dynamic markets. Thus, public and private schools act as main actors in the development of those valuable skills. It necessitates to evaluate factors affecting the quality of education of secondary schools across nations. The importance of education quality in sustainable development is huge and has gained attention of majority of researchers, policy makers and governments (Jalongo et al., 2004). However, there is still a substantial gap between the outcomes obtained to date and the education goals predetermined by UNDP regardless of implementing several efforts to drive for improving education in schools (Lopez, 2010). The shortcomings at pursuing the UNDP goals are evidenced

Figure 1. Percentage of children in and completing secondary sc



Source: US database. Regional Averages for completion rates calculated by the UNESCO Institute for Statistics (UIS)

by the fact that there are still 258 million children including 59 million children of primary school age, 62 millions of lower secondary school age and 138 millions of upper secondary age around the world who are not receiving minimum level of learning required to reach sustainable development goals.

All in all, to achieve SDG Target 4, there is need significant enhancements to be implemented to widen access to all kids to get knowledge along with enhancing quality of teaching and learning to achieve effective learning outcomes across nations. Accordingly, we need derive a solution to overcome above mentioned concerns in education system. And this can be done by measuring quality of education in secondary schools to determine the extent to which state's education policy and system operates effectively and successfully. However, determining school quality is

completely baffling and complicated to measure and quantify due to its multifarious nature. As Sallis (2002) considers quality in education as a multi-dimensional concept with numerous factors. Also, there is no definite explanation and classification of education quality and there is no comprehensive agreement on what is the proper policy or approach to assure and manage quality in education system (Becket, 2006; Brucaj, 2014; Harvey, 1995).

Thereby, when addressing what composes a quality of school education, various stakeholders define quality in different ways. For instance, school principals, policy makers evaluate quality of schools in terms of high grades of students or admission rate of graduates into higher education, while other community members, parents are assessing quality of schools in terms of facilities implemented at school, school reputation, word of mouth and their observation (Schneider et al., 2017). However, both approaches measuring quality in education are suffering from number of issues. When we employ test scores to measure school quality, as if we rely on thermometers to weigh up our temperature, it is just useful tool to inform us whether we got ill or not, however, it does not allow us to get full picture of our health conditions, whole picture on what causes and what type disease we are suffering, we can never obtain with the help of thermometer. Similarly, test scores cannot inform us about everything we want schools to accomplish. Test scores tell us nothing about student character, well-being outcomes, teaching and learning conditions, and school culture, as well. This is because of high correlation between school assessment scores and parental education and socioeconomic background of a learner (Reardon,2011; Davis-Kean,2005).

However, very few literature review studies focusing on measuring quality of secondary education have been conducted. Studies systematically reviewing how to measure learning outcomes in Higher education have already been conducted (Balzer et al. (2016), Tan et al. (2016). Diaz and Martinez-Mediano (2018) stressed out that "there is a high need to gather systematic evidence based on exact research to settle debates on measuring quality of education in schools." Chasing this suggestion, the present article attempts to shed light on what has already been disclosed in the field of measuring quality of schools in secondary education, by methodically gathering and analyzing existing evidence. This will assist scholars in demonstrating a clear view and detecting any controversies about measuring learning outcomes in secondary schools.

Methodology. The SLR accompanied in the present study was based on the methodology projected by Tranfield et al. (2003). SLR involves three steps: planning, conducting and reporting/dissemination. The same methodology has also been applied by Tari and Dick (2016) in reviewing MQ in HE institutions.

Step 1. In first stage, I determined the review protocol, making decisions about the objective of the study (formulating the research questions), the population of articles (key data resource), the search strategy for identification of relevant articles and the criteria for inclusion and exclusion of articles in the review. The research limited its focus by acknowledging only publishers of peer-reviewed academic articles in social and pedagogy science. The practice of using only peer-reviewed articles, which are considered validated knowledge (Ordanini et al., 2008), is common in reviewing the MQ field (Al-Kurdi et al., 2018; Prakash, 2018). The selected academic publishers were the following: Emerald Insight, Taylor and Francis, Elsevier/Science Direct, Springer Link, Sage Publishing, and Wiley Online. All article types, such as literature reviews, conceptual and empirical articles, case studies and surveys were included in the sample (Bhamu and Sangwan, 2014).

Table 1. Requirements for inclusion and exclusion in the literature review

Inclusion criteria	Exclusion criteria
Popular databases: Web of Science, Science Direct, Springer Link, Sage publishing, Taylor and Fransis academic journals Articles studying measuring quality of learning outcomes, quality assurance articles related to secondary education Articles written in English Language	Non-academic databases Books, conference precedings, bachelor's and master's thesis, doctoral dissertations, textbooks) Articles related to primary, vocational, business, higher education Articles written in any other language rather than English.

The inclusion and exclusion criteria were implemented to limit selection of irrelevant articles and ensure viable outcomes.

Step 2 - conducting the review

To identify significant and relevant articles and create the article sample, search strings were constructed based on the search terms and keywords identified in the planning stage. A search string is a combination of search terms, two or more words in a certain order, which are entered by a user into a search engine (search box) to find desired results. An example of search string is the following: quality of school, Secondary education, Quality assurance, measuring school. The search strings were applied in the same way to the academic databases, resulting in many related articles. Based on their title, abstract and keywords, the articles were screened appropriately and examined for their fit with the research focus of the study. In some cases, where the relevance was not clear enough, I read the full article. The disciplined hand screening process extracted 50 articles. I read the abstracts of the articles and excluded those which focused on topics in isolated research areas. I removed 20 articles; thus, the final sample included 30 relevant articles shown in the following table.

Table 2.

First author (year) Country	Study aims	Study Methodology	Sample characteristics
Jack Schneider, Rebecca Jacobsen, 2017 USA	To demonstrate a new framework for measuring school quality represents a fuller picture of what people care about in a school.	Student survey and a teacher survey, which were administered electronically to all teachers and all students in grades 4 and up. The rest of the data came from the state or the district.	recruited 50 demographically representative community members, an impressively diverse group.
Don Adams, 1993 USA	To identify multiple meanings of educational quality and to draw distinctions between quality and some of the other related educational concepts used to characterize and assess educational systems, organizations and programs.	Qualitative design case studies	Cases are taken from different studies, literatures
Suman Ahmmeda, Jashodhan Saha, 2022 Bangladesh	To explore the key “driver” constructs of primary and secondary level school quality.	quantitative cross-sectional research design, used Partial Least Squares Structural Equation Modeling (PLS-SEM).	April 2021 to January 2022 at 128 primary and secondary level schools in 38 different districts of Bangladesh
Elizabeth Leu, Alison Price-Rom, 2007, USA	To review selected literature that places teachers at the center of creating educational quality.	Qualitative design. Review several international literature	
Yaw Ankomah, Janet Koomson 2005, Ghana	To review available Ghanaian generated literature that throws light on some quality issues in education. Therefore, the review also draws on few literature from Europe and America and on research and analyses of quality education in other African countries.	Government policy documents and circulars, discussion with Chairman of 2002 education review committee as well as personnel of the Ghana Education Service. Library search for books, chapters in books, Journal articles and conference/workshop papers on quality education related issues.	

Angeline M. Barrett, Rita Chawla-Duggan, 2006, UK	To review key documents that have influenced understandings of educational quality in low income countries amongst international agencies concerned with and researchers based in Anglophone countries.	Qualitative design.	
Javier Vel´asquez Rodrígueza, Dionicio Neira Rodadoa, 2022, Colombia	To derive a multidimensional indicator to measure quality in education in public high schools in Colombia	Quantitative design.	databases and teacher surveys.
David Chapman and Don Adams (2002), Asian Development Bank, Philippines	To examine the concerns expressed among developing member countries of the Asian Development Bank (ADB) about education quality, to review relevant research, focuses directly on teaching and learning, and suggests strategies that countries committed to quality improvement might use to raise school quality over the next decade		Eight country case studies and five technical working papers
Dr. Rehaf A. Madani, 2019, United Emirates			
Hanushek, Eric A.; Woessmann, Ludger. 2007. Washington	To review the role of education in promoting economic well-being, focusing on the role of educational quality	Regression Analysis.	International Adult Literacy Survey (IALS) Samples include full-time workers between 26 and 65 years of age.
E A Hanushek, L Wo¨ ßmann, 2010. USA, Germany	Quality education matters in economic growth.	Statistical analysis	PISA results (2000)
Arundhathi Thangeda, Bakisanani Baratiseng, ThatoyamodimoMompati,	Education for Sustainability: Quality Education Is A Necessity in Modern	Journal of Education and Practice	Regression analysis

	Day. How Far do the Educational Institutions Facilitate Quality Education?		
Yoshida 1994, Japan	The Deming Approach to Education: A Comparative Study of the USA and Japan	Comparative Analysis	Case study
Bergmann, 1996, UK	Quality of Education and the Demand for Education: Evidence from Developing Countries	Case study	Case study
Lagrosen, 1999, USA	TQM Goes to School: An Effective Way of Improving School Quality	Case study	Case study
Verwimp, 1999	Measuring the Quality of Education at Two Levels: A CS of Primary Schools in Rural Ethiopia	Case study	Case study
Knipprath, Arimoto, 2007	The Impact of Education Reform on the Quality	Educational Research and Policy, Practice	Case study
Gillies, 2007, USA	Excellence and Education: Rhetoric and Reality	Education, Knowledge and Economy	
Bolotov, Efremova, 2007, Russia	The System for Evaluating the: Quality of Russian Education	Russian Education, Soceity	Case study
Sifuna, 2007	The Challenge of Increasing Access and Improving Quality: An Analysis of Universal Primary Education	International Review of Education	Case study
Odhiambo, 2008	Elusive Search for Quality Education: The Case of Quality Assurance and Teacher Accountability	International Journal of Educational Management	GR
Ng, P.T, 2008	The Phases and Paradoxes of Educational Quality Assurance: The Case of the Singapore Education System	Quality assurance in Education	Case study
Zhang, Qin, Liu, 2019, China	Improving Education Equality and Quality: Evidence from a	International Journal of Educational Development	Research Paper

	Natural Experiment in China		
Brien, McNamara, O'Hara, Brown, 2019, UK	Irish Teachers, Starting on a Journey of Data Use for School Self-Evaluation	Studies in educational Evaluation	Research paper
Liu, Visone, Mongillo, Lisi, 2019	What Matters to Teachers if Evaluation Is Meant to Help Them Improve?	Studies in educational Evaluation	Research paper
Guerra, LastraAnadon, 2019, Spain	The Quality-Access Tradeoff in Decentralizing Public Services: Evidence from Education in the OECD and Spain	Journal of Comparative Economics	Research paper
Harma, 2019, Africa	Ensuring Quality Education? Low-Fee Private Schools and Government Regulation in Three sub-Saharan African Capitals	International Journal of Educational Development	Research paper
Podgornik, Vogrinc, 2017	The Role of Headteachers, Teachers, and School Counselors in the System of Quality Assessment and Assurance of School Work	Sage open	Research paper
Suominen, Kallo, Rinne, Fan, 2017	Subtle Convergence? Locating Similarities between Chinese Educational Reforms and Global Quality Assurance and Evaluation Trends	Quality Assurance in Education	LR
Ibrahim, Arshad, Salleh, 2017	Stakeholder Perceptions of Secondary Education Quality in Sokoto State, Nigeria	Quality Assurance in Education	Research paper

Following the procedure of SLR, contained fields concerning the article title or concept, the year of publication, the authors' surnames, the article type, the geographic research area and the number and type of schools studied were illustrated in excel spreadsheet (Hu et al., 2015). Due to the broad scope of the research questions how to measure quality of secondary education, study findings systematized to highlight potential aspects those are frequently addressed in the articles. An affinity diagram was applied to organize the mixed findings, based on their affinity, into clusters of meaningful themes (Psomas et al., 2019).

Step 3 - reporting and dissemination

Based on the excel spreadsheet developed in Step II and the affinity diagram, a clear picture of the sample articles was created. A full report including an introduction, methodological part, commentary on the nature of the evidence identified, detailed findings and conclusions, was written. The main parts of this report are presented in

this review paper.

Results and discussion. Hence, a vast literature has appeared on educational quality in recent years, examining factors that help improve education and proposing ways to promote better learning in schools. In a search for the factors that promote quality, countries' programs as well as the literature increasingly emphasize teachers, schools, and communities as the engines of quality, with teacher quality identified a primary focus.

Educational quality has always been implanted within nations' policies and programs. There are many components concerning the issue of viewing the school as a system. Policy system of schools, the teachers, and the pupils alone are not entire solution that lead to education quality explanations. The Systematic Literature Review offered a framework for education quality consisting of four scopes as follows:

1. Learner characteristic measurement: capability, experience, Socioeconomic background, place of domicile, health condition, gender, etc.

2. Contextual measurement: sociocultural and religious aspects, labor market conditions in a society, public resources, globalization, peer-affect, time spent in class and for homework;

3. Input measurement: quality of learning and teaching such as teaching methods, teaching and learning materials, assessment, feedback, class size, teachers, facilities, principals, etc.

4. Output Measurement: literacy, numeracy, creative and emotional skills, values and social benefits.

A more recently established way of focusing on quality emphasizes the content, conditions and relevance of education. This way to quality concentrates on procedures in school activities and interactions between school and other stakeholders ranging from students to society. The main concentration is given to the process in which inputs cooperate at secondary schools form the quality of learning (Carnoy and de Moura Castro, 1995; Muskin and Aregay 1999; UNISEF 2015, World Bank 2015).

Thus, Harvey (1993) developed a framework for quality by drawing five goals for education that outline the view of quality within individual systems. Education quality can be viewed as followings:

a) As exceptionality where excellence is the perspective of quality that derives education,

b) As consistency which requires equality in schools and classrooms across the system,

c) As fitness-for-purpose in which students are taught for determined roles by stressing instructional specialization,

d) As value for money, education has always rewarded individual and nations' investments in knowledge, quality is considered as the extent to which education carries value for money,

e) As transformative power that promotes positive social change in societies (Kubow and Fossum, 2003).

Similarly, Hammond (2013) also considers education as a main powerful weapon that can be used by nations to change world towards self-enlightenment. He asserted that good education covers all aspects of learning environment including learning resources, program and modules, lecturing methodology, technology in teaching and learning, co-curricular activities, pupils and teachers opinions and appraisal toward education. Thus, classroom and school related concerns have taken attention of scholars and governments as a driver of quality. USAID funded Community Schools Activities Program (CSAP) carried out by Prouty and Tegeng (2000) pointed out that CSAP schools' authorities considers developed teacher skills, enhanced relationships and positive attitude between instructors and learners, learners with learners main factors effecting performance of schools. Authors asserted that increased learning

time for learners while decreasing workload and size of classroom groups help to achieve higher quality in students' learning outcomes.

Particularly, Longitudinal studies delivered in the US have been vital in representing some of the key elements in producing and maintaining poor achievement. The study compared the academic development curve of pupils during the academic year and during the summer holiday, and their findings prove that schools or students' misachievement in their academic life is the only and main guilty, instead, families and communities are main factors affect to students' achievement. This result powerfully supports the notion that schools are main actors in developing cognitive skills, but it also requires a constant support of parents and communities for underachieved and disadvantaged students (Alexander K.L, 2001).

Interviewing city residents, conducting surveys, and running small focus groups with different sets of stakeholders, including all school principals, community leaders, teachers at each school, parents, and district administrators, Jack Schneider and Rebecca Jacobsen (2017) derived a constructive framework to measure school quality represents a fuller picture what parents and communities care in American schools. Authors criticized district authorities for tracking data on educational quality in terms of class size, attendance rates, on-time graduation rates, teacher turnover, spending on professional development or range of extra-curricular activities available for pupils in school. As a result, they constructed new framework representing three powerful input categories, namely, teaching environment, school culture and adequate recourses are the main factors producing high learning outcomes in schools, however, schools those are lacking those elements more likely stay behind. The rest two output categories in the given framework are academic learning student character and well-being which are resulted from strong inputs in schools. They stressed out that school quality should be measured fairly and accurately and proposed not to ranking schools against each other, instead, it is expected to demonstrate progress that each school is making, on multiple stages, to attain predetermined standards of quality or exceed those specific standards.

Conclusion. Whatever the extensive way of looking at quality, most nations' strategies outline two main components as quality: learners' cognitive development and social/creative/emotional growth. There is a growing debate over both key policy elements. On one hand, there is a wide discrepancy on what to evaluate as cognitive achievement and how to gauge it. On the other hand, there is no effective approach of measuring emotional development of students (UNESCO, 2010). The Education For All report provides a framework with measurements for comprehending, supervising, and enhancing quality of learning outcomes. These dimensions are very crucial for policy makers in understanding and organizing various variables facilitating quality of education, teaching and learning environment. They are followings:

1. Students background and characteristics highly influence quality of education while including learners' ability, readiness for school, hard-working and diligence.

2. Context dimension also considerably affects quality of schools as it comprises socioeconomic and cultural status, labor market characteristics, teacher quality, salary and experience of teachers, parents' endorsement, and public resources.

3. Techniques and methods employed in teaching and learning are also crucial in quality assurance. This component includes learning time, teaching techniques, assessment and feedback, class size.

4. Output dimensions or outcomes are final indication of quality of education. It can be assessed by literacy, numeracy and critical and creative skills obtained during study period in school.

To sum, as it has been noticed above discussion, quality of education is a multi-dimensional concept as it can be defined in various ways, all lead us to the same track, mostly associated with fitness of use and satisfaction of necessities of strategic

communities including governments, parents, principals, teachers and learners. Accordingly, quality of performance of schools can also be measured applying several kinds of indicators depending on each schools' interests and objectives.

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