

The Quality of Secondary School Students on English, Mathematics, and Science Academic Performances; *Outcomes, Problems, and Strategies*

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Abstract: *The objectives of the study were to find out the quality of secondary schools students academic achievements, to identify obstacles that hinder the quality of secondary schools education, and finally to seek out strategies to deal with the problems. There were 69 respondents of the research. The research used documentary study to find out information on the secondary school students' academic performances, employed library research method to seek out strategies, and used survey to identify problems and the students' academic performances. The Quantitative method and research design survey were administrated to ask the respondents to respond to a 4-point Likert scale questionnaire rating the students mathematics, science, and English academic performances with 1=not accomplished to 4 = well accomplished. The study adapted Indonesian Ministry of Education and Culture's (MOEC) instruments to determine the students mathematics, science, and English cognitive performances. The findings of the research reveal that the qualities of middle schools academic performances are far from being expected. In other words, the student's competences on English, mathematics, and science need improvement. The problems include knowledge, comprehension and application. The research offers some strategies which include evaluation, university and secondary school collaboration, mentorship and tutorial, and learning behaviors. By so doing, the quality of academic performances can be achieved.*

Keywords: Education Quality, English, Mathematics, and Science, Academic Performance, Mentorship and Tutorial, Learning Behavior

1. Introduction

One of the most important education issues is the quality of education. Government, stakeholders, scholars, and educators have continuously made some efforts to reach the quality of education. They believe that the quality of the society is determined by the quality of the schools outcomes or product. The better of the school outcome, the better of the community will be. Therefore, it is important that government should prepare for better human resources by providing a good basic education to the secondary school education because they will be future generation in the upcoming years.

A nation's purpose in educating the secondary school students is to prepare them to be productive member of society. To reach the objectives, the government of Indonesia has developed a system of education based on its needs, economic resources, and tradition. The system of education includes establishing 'education for all' (EFA) (Ministry of National Education, 2007) and expanding the length of free basic education (FBE) from 9 years to 12 years (Pague & Sparrow, 2005). As a result, all Indonesian citizen aged 7 to 15 years have the right to gain basic education (UNESCO, 2010). In addition, the system of formal education in secondary school has been designed to create innovative students who are able to master four

competences which include religious competence, social competence, knowledge competence, and skill competence (Ministry of National Education, 2018). Therefore, the objective was to prepare for the community who are actively participate in developing the country in the future.

The government of Indonesia (GOI) has continuously been working hard and designing the programs to develop the quality of secondary school students. The programs have been designed to spur the quality of secondary education. One of the programs is providing the primary students as well as junior secondary students with fund to back up their school finances. The program is well known as a 'school assistance fund' (SAF) or Bantuan Operasional Sekolah (BOS) (Ministry of National Education, 2009). Another initiative is increasing in salaries of incumbent teachers to develop their teaching performances and give positive effects on students learning performance as well as their academic achievements (UNESCO, 2010). Other strategies are allocation of 20% of the state budget to education as well as upgrading the the qualification of teachers who are eligible to teach in the lower to upper secondary schools (UNESCO, 2010). Indeed, the plans are intended to enhance and maximize both the teachers performance and the students learning outcomes.

Despite the fact that the government of Indonesia has already been working hard to upgrade the quality of secondary school student's education, the education quality still have not been reached. The teachers teaching performance and the students academic performances are far from being expected (Muttaqin, 2016). In addition, increasing incumbent teachers' salaries through teacher certification does not necessarily have positive effects on both teachers teaching performances and students learning performances (Ree et al., 2018). As far as quality education in Southeast Province is concerned, Indonesian Nasional Education Standard (2018) found that the average academic achievement in Southeast Sulawesi was in the last 3 from 34 provinces available in Indonesia.

Minister of Education and Culture (MOEC) (2016) has already stipulated the education law 28 of 2016 which determined or set out 8 national education standards to measure the quality of education. The education Quality Assurance Council (EQAC) (2018) used the standards to measure the quality of secondary school education in Kendari city, The EQAC found that the average pure exam mark was 3.6 (on a scale 1-7). In addition to that, the results of average the ninth grade national exam in middle school in Kendari was 46.23 (pass marks was set at 50.50). The score indicates that the students' academic performances are still far from the standart set by Minister of National Education. Based on the problems, this research tries to find out how far the quality of education in secondary schools has been achieved, to identify problems or obstacles that hinder the quality of education, and finally to seek strategies to deal with the problems in secondary schools in Kendari city southeast Sulawesi Indonesia.

2. Literature Review

2.1 The Quality of Education Lead to Better Human Resources

Currently, the issues of quality education are becoming trends among scholars, educators, practioners, and stake holders. One of the issues is the quality of education. Some scholars are questioning to what extent can quality of education be classified or categorized as qualified or not qualified. There is no single agreement on what 'quality of education' are all about. Halliday (1994) states that no consensus have been made by police makers and practioners to form exact definition of what quality education are all about. Some definitions of quality in education are offered by some experts and organizations. Babalola (2011) points out that the qualities of education are related to input, process and product. Furthermore, Educational quality means efficiency, effectiveness, equity, and quality (Adam, 1993). As far as quality of education are concerned, United Nation on education defines educational quality as involving learners, content, process, environment, and outcome (UNICEF, 2000).

Educational quality is imperative to enhance the quality of human resources. The quality of education are extremely urgents since they have greater effects on someone working achievement, way of thinking, and custom (Thangeda et al., 2016). In addition, Thangeda et al. point out that the

individuals and the nations can benefit from the quality of education as they are becoming creative and innovative society and they will be facilitating country's economic development. The quality is then triggering the productivity that leads to country economic growth (British council, 2014). UNICEF (2000) highlights that access to the quality of education will impact on people lifestyle simply because the quality of education assists and builds the individuals critical thinking, become problem solvers, and develops their competences in making right decision. Therefore, the quality of individuals is necessary to facilitate them to have positive contributions within the society as well as the nation growth.

The quality of school provides people with good knowledge and skills. People learn knowledge and skills in different ways, one of them is through education either formal or nonformal education. Education is a better instrument to facilitate individuals to be well prepared for the job (Woya, 2019). Furthermore, it is important that education be excellent and qualified so that individuals are able to get knowledge and skills to support their nation on social and economic progression (European Commision/ EACEA Eurydice, 2015, Chitty, 2002). The knowledge they have gained is important in which it will facilitate the society to be productive and professional society, help the nation planning, and finally they lead to the country economic development (British council, 2014).

2.2 The Role of School and Parent as well as Community in Enhancing The Quality of Education

Both school and parent have significant roles in developing a good and a qualified education. There is no doubt that school where students learn knowledge and skill plays crucial element in enhancing human capacity. School facilitates learners to gain and develop their attitudes, skills as well as knowledge (Permendikbud, 2013, no.54). According to Bank (2005) schooling has three purposes; "as human fulfilling, preparation for the world of work, and as an essential element of social progress and social change" (As cited in Barret, Duggan, Lowe, Nickel, and Ukpo, 2006, p.12). In addition, it is undeniable that school must provide quality in education for the learners. Dagger (2005) highlights characteristics of good school are as follows; the school has a good leadership, a good academic atmosphere, conducive to learning and teaching, and regularly evaluate students academic performance (As cited in Arifin et al., 2016). All in all, it is undeniable that better education can be produced through education or schooling.

The collaboration among parent, community, and school committee lead to the quality of education. There have been lots of researchs on parents involment in developing school quality. Duke and Canady (1991) state that parents' involvements in the school have a positive impact on school programs. and their participations are indeed improve the quality of the school quality (Murillo, 2002). Arifin et al., (2016) point out that the more the parents get involved in the school committees the better the students achievement will be. In addition to that, Bloom (1985) found that most of successful young people in any fields due to their parents anthusiastic involvement in their lives (As cited in Rose &

Nicholl, 2006, p.331). As far as community involvement are concerned, it is unavoidable that the collaboration between the schools committees and community are efficacious in leading to students to learn (Pradhan et al., 2011)

2.3. The Quality of Education Models/Frameworks

There have been lots of concepts and frameworks concerning with quality in education proposed by some scholars as well as bodies of national and international organizations. The quality of education will not run smoothly unless all parties and levels are significantly get involved and participated to reach a good quality of education (Garira, 2020). Therefore, it is crucial that to upgrade the quality of education, it needs model or framework to follow to see the overall guises of the education quality. One of the frameworks or concepts to determine education quality is development outcomes concepts which include learner characteristic, context, inputs, and outcomes (UNESCO, 2010). The body indicates that outcomes mean how far the learning objectives have been reached through national examination and test

Over the past few year, the quality of education have been focusing merely on input, context, and output. Recently, the trend is changing into achievement of outcome. In order to find out the students learning outcomes, it is necessary that students/learners' achievement of outcomes be identified through assessments in order to measure students quality or outcomes of their competences. Research on the issues of assessments; feedback for progression (Banks, 2005), learning outcome purpose (Burton, 2003), and collecting information on learners competence, knowledge, comprehension, attainment, and attitude (Penefflorida, 2006). Providing the learners with feedback and assessment is crucial to measure the learner's quality outcomes. The results of outcomes are therefore be used to evaluate or determine whether the teaching and learning process need to be upgraded, or whether they need redefining and reworking (Banks, 2005).

Another concept/framework quality of education is 'the absence of problem model' Cheng and Tam (1997, p.27), 'ineffectiveness model', (Cameron, 1984). Problem identification are completely needed in enhancing the quality of education, since it provides educational institution as well as administrative with quality information on what have and have been achieved. In regard to 'the absence of problem model, Cheng and Tam point out that " identifying strategies for the improvement of an educational institution can be more precisely done by analyzing problems and defects as opposed to education quality" (p.27). by knowing and mapping what the problems are, make it easier to define what kind of performance measurements are needed to be applied.

The other concept or framework of educational quality is the concept of 'Sustainability' (Barret et al., 2005). This framework proposes that education quality should holistically be seen from now to the future and try to seek appropriate strategies to deal with the problems. By so doing, the curriculum and the teaching and learning activities can be adapted to suit with rapidly global changes.

The strategies include curriculum development, providing the school with book resources, teaching and learning equipments, teachers training, and providing the schools with qualified books in the library (Wisman, 2017). Furthermore, total quality management (TQM) can also be used to improve the quality of education, in which evaluation and correction should continuously be made in order to cater for individual (students) wants and needs.

3. Research Design and Method

The research employed quantitative and qualitative research designs. This study involved 69 respondents which included 24 junior high school teachers (math, science, and english teachers) and 45 tutors. The tutors have been teaching math, science, and English at Learning Tutor Institutions, such as Primagama Tutoring Institution, Jakarta Intensive Learning Centre (JILC), and 4GO Tutoring Institution. The research used documentary study to find out data to make sense of information on secondary school student's academic performances, to employ library research method to seek out strategies to deal with the students obstacles that hinder the students academic performances, and to use survey to get the students problems as well as their academic performances. Therefore, Quantitative method and research design survey were administrated to ask to respond to a 4-point Likert scale questionnaire rating the students mathematics, science, and English academic performances with 1= not accomplished, 2= somewhat accomplished, 3= accomplished, and 4 = well accomplished. The questionnaires were adapted from Indonesian ministry of education and culture's (MOEC) instruments to get the students math, science and English cognitive academic achievements. The data were descriptively analysed (mean rating) to get the answer of the research objectives

4. Findings and Discussion

The quality of education play important role in improving the quality of human resources. However, the education quality should not partially be seen from one angle. They should be viewed from different perspectives. The researchers try to examine the quality of education from three different points of views such as outcomes, problems, and strategies.

4.1. The Secondary School Students Learning Outcomes (National Exam Result)

Analysing and mapping learning outcomes are crucial in enhancing the quality of education, since they are as instruments to mitigate how far the programs offer or provide have constructive effects on students learning achievement. The Indonesian Ministry of education and culture use national exam to measure the students learning outcomes. The examined subjects include; Indonesian Language, English, Mathematics, Biology, and Science. The researchers analyzed the students learning outcomes by examining their knowledge to the four subjects.

There are fifty five (55) (publics and states) secondary schools which participated in national exam in 2019. The results of the exam showed that, there were only 10 schools

(19 %) were able to reach the mean scores. The descriptions can be seen in the following table 1

Table 1: Secondary School Average Scores on National Exam in 2019.

No	Schools	Average Scores (range of 1 to 500)
1	SMPS Frater Kendari	252, 06
2	SMPS TQ Muadz Bin Jabal Kendari	242, 24
3	SMPS Islam Terpadu Al-Qalam Kendari	241, 06
4	SMPN 1 Kendari	230, 28
5	MTs Pesri Kendari	227, 90
6	MTs Swasta Al Fath Kendari	224, 10
7	SMPN 9 Kendari	214, 74
8	SMPN 4 Kendari	212, 31
9	SMPN 5 Kendari	209, 50
10	MTs Negeri 1 Kendari	207, 18

Source: Department of Education and Sport, Kendari City, in 2019

National exam in High Schools have been specifically designed by Indonesian Ministry of Education and Culture to measure the students learning performances on Indonesian language, English, Mathematics, and sciences. The results of the exam determine the quality of the students learning outcomes. Table 1 shows the schools average scores on the national exam. As can be seen, no one school was able to reach the highest score (500). The majority of the schools could not get more than 260 above scores (in a range of 1 to 500). Off the best top ten schools, Private high school Frater Kendari was the only one school which was able to reach above the mean score, its score was 252.06. The others were below the mean score such as private school Muaz bin Jabal Kendari, its score was 242.24. The fifth position was placed by private school Pesri Kendari (227.90), and the last top ten was Public MTs 1 Kendari, its score was 207.18. Evidence reveals that the schools need to work hard to enhance the students learning performances. However, it is alarming to note that the qualities of students learning outcomes are still far from being expected.

Table 2: The Average Scores of 14 Secondary Schools National Tests Results in 2019 Academic Year

NO	Schools	The Average Score on the Subjects (Range of 1 to 100)				
		Indonesia language	English	Mathematics	Science	Average (%)
1.	SMP Negeri 1	62.94	60.95	44.08	52.04	57.57
2.	SMP Negeri 4	67.40	53.27	42.06	49.58	53.08
3.	SMP Negeri 5	67.64	52.58	41.22	48.06	52.38
4.	SMP Al-Wahdah	69.40	50.53	40.00	46.42	51.59
5.	SMP Negeri 15	62.56	45.94	38.52	43.20	47.56
6.	SMP Negeri 17	60.07	43.56	36.35	41.99	45.49
7.	SMP Negeri 7	59.67	41.61	37.48	42.29	45.26
8.	SMP Negeri 3	58.75	42.92	35.73	41.10	44.64
9.	SMP Negeri 8	58.10	43.08	34.31	39.85	43.84
10.	SMP Negeri 6	56.79	40.53	35.70	41.14	43.53
11.	SMP Negeri 19	55.30	43.19	33.18	40.07	42.94
12.	SMPS Hasrati	55.57	39.86	34.46	40.54	42.61
13.	SMP Negeri 16	51.79	40.95	35.26	38.82	41.71
14.	SMPS Muhammadiyah	44.71	36.19	32.14	35.18	37.06
Average Score						43.73

Source: Center of Education Quality Assessment, Ministry of Education and Culture. Can be reached at <https://bionsmama.kemdikbud.go.id/laporanun/>

National exam has been proposed to check how far the teaching and the learning process in the schools have impacts on the students learning outcomes. As the quality of education has been demanded and fostered to fulfill the future working performances, concern about human better resources is therefore a must. Table 2 shows the average scores on national exam of 14 High Schools in Kendari city in 2019 academic year. As can be seen in table 2 there was only one school

4.2. Educational Quality Assurance Council (EQAC) (2018) assessment on Secondary School Students Quality.

Indonesia National Education System (INES) adapting a concept Eight Educational System Standards (EESS) which include ; (1) standard of content, (2) standard of process, (3) graduate competency standard, (4) education staff, (5) infrastructure, (6) management, (7) financing, and (8) evaluation. Therefore, The Indonesian Educational Quality Assurance Council (IEQAC) (2018) Southeast Sulawesi province used the standards to evaluate and to find out the

quality of the secondary school students academic performances. The IEQAC annually conduct the survey to assess and monitor the quality of education in secondary schools available in Kendari city. The results of the survey reveal that the average quality of learning outcomes of Junior High School in Kendari city was 3.6 (on scales 1 to 7).

4.3. Secondary School Students Academic Performance (Survey results)

Table 3: Mean rating of responses on students science (Physics) competences.

No	Knowledge, Comprehension, and Application	Mean	Remark
1.	The students are able to comprehend and identify about measurement and the concepts of substance and its form	3.35	accomplished
2.	To explain Newton Law/Theory	2.71	somewhat accomplished
3.	To distinguish among sounds, vibrations, and waves.	2.94	somewhat accomplished

4.	To describe energy	3.24	accomplished
5	To compare between temperatures and calories	3.35	accomplished
6.	To deduce the concept of substance and its form	3.00	accomplished
7.	To analyze stress	3.00	accomplished
8.	To formulate Newton Law in basic mathematics formula.	2.71	somewhat accomplished
	Average score	3.04	accomplished

Table 3 shows the mean scores on science. As can be seen from the data, most of the learning objectives or skills in terms of knowledge, comprehension, and application can be achieved well by the secondary school students. The students average mean score on science was 3.04. However, the students did not have sufficient knowledge (2.71) on Newton law either theory or application. Comprehending the theory of Newton’s law is crucial because it is a grounded theory for later physics progression, and Lacking of proficiency in science particularly in Newton Law may become barriers in understanding physics.

Table 4: Mean rating of responses on students science (Mathematics) competences

No	Knowledge, Comprehension, and Application	Mean	Remark
1.	The students are able to comprehend and master integer operations	2.9	somewhat accomplished
2.	Understand about fraction, square root, and even and odd numbers.	2.8	somewhat accomplished
3.	Be able to use lines and progression in math	2.8	somewhat accomplished
4.	To calculate the linear of equations and inequalities in one variable.	2.9	somewhat accomplished
5	To determine linear equality	2.8	somewhat accomplished
6.	To describe data in table, venn diagram, line diagram	2.5	somewhat accomplished
7.	To calculate lines and angles	2.7	somewhat accomplished
8.	To comprehend material about Pythagoras	2.6	somewhat accomplished
9.	To apply their knowledge about algebra	2.6	somewhat accomplished
10.	To apply the system of linear equality in two variables.	2.8	somewhat accomplished
11.	To calculate linear equality, relation, and function	2.7	somewhat accomplished
12.	To construct curved side space	2.6	somewhat accomplished
13.	To use logical thought in relation to social arithmetic	2.9	somewhat accomplished
14.	To present congruent	2.6	somewhat accomplished
15.	Be able to analyse probability theory	2.5	somewhat accomplished
	Average score	2.71	somewhat accomplished

Evidence from table 4 reveals that secondary school students mathematics academic performances are still far from being expected. As shown by the data in table 4 all of learning objectives in terms of knowledge, comprehension, and application have not been achieved well. Most of the students average mathematics proficiency was 2.71. the score indicates that the students mathematics academic

performance are not sufficient. In other words, they do not have enough knowledge to move to other high level of mathematics skills. Understanding mathematics is vital because it is used on the daily basis. Therefore, It is imperative that the students need to work hard to enhance their quality in mathematics. Poor proficiency in mathematics can lead to breakdown comprehension to other related subjects.

Table 5: Mean rating of responses on students English competences

No	Knowledge, Comprehension, and Application	Mean	Remark
1.	The students are able to comprehend the topic, issues, and problem in the reading texts	2.9	somewhat accomplished
2.	Be able to identify the purpose, function, and message of the text	2.8	somewhat accomplished
3.	Be able to identify the use of context, place, time and situation	2.8	somewhat accomplished
4.	Be able to analyse texts, purpose, idea, and main idea	2.9	somewhat accomplished
5	To understand plot and thought	2.8	somewhat accomplished
6.	To recognize word order	2.3	somewhat accomplished
7.	To recognize article, demonstrative, and possessive pronoun	2.7	somewhat accomplished
8.	To recognize agreement and number	2.6	somewhat accomplished
9.	To comprehend tenses	2.6	somewhat accomplished
10.	To identify preposition	2.8	somewhat accomplished
11.	The students are able to classify attitude and message in the text	2.7	somewhat accomplished
12.	Be able to distinguish between passive voice and active voice.	2.6	somewhat accomplished
13.	The students are able to identify modals	2.6	somewhat accomplished
14.	Able to explain about conditional sentence	2.2	somewhat accomplished
15.	Able to recognize derivative construction	2.3	somewhat accomplished
16.	Be able to analyze sentence and phrase	2.4	somewhat accomplished
17.	Be able to identify references	2.3	somewhat accomplished
	Average score	2.4	somewhat accomplished

Figures in table 5 shows the mean score of the secondary school students English proficiency. The results show that what the students know or comprehend about English are below expectation. No learning objectives like knowledge, comprehension, and application can be reached by the students. Their average score on English academic performance was 2.6. Since English as an international language and lots of literature are written in English, it is therefore important that students improve their English proficiency, knowledge as well as its application. The students’ Failure to do so can be obstacles to access into a wider range of information.

4.4. Secondary School Students Academic Obstacles/ Problems

After having such deep analyses through documentary studies which include national exam, EQAC evaluation, and survey, the researchers found the problems as follows: In regard to the results of the national exam, they revealed that most of the schools could not achieve the passing grade (55%) imposed by the Indonesian Minister of Education and Culture (MOEC). Of the top ten secondary school, there was only one school could reach above the mean score, its score was 252, 06 in a range of 1 – 500. Of the 14 schools, there were 12 schools have successfully achieved good scores on the subjects of 'Indonesian Language' and 'Pancasila Education.' The two subjects average score was 60.5%, in range of 1-100. However, no one of the schools (14) was able to pass the passing grades on the related subjects of Math, English, and science. The average score on the subjects was 52% score. Mathematics was one of the lowest score (38.52%), followed by science (48%). Since the students could not accomplish well on English competences which include knowledge, application and comprehension, the students need to work hard on the subject. Some of the secondary students problems on sciences include; sounds, vibrations, and waves, electrical waves and magnetic, substance measurement and its form, and Some of secondary school students problem on Math include number, algebra, geometri, integer operation, describe data in table, venn diagram, and line diagram, probability theory

4.5. Strategies to Enhance Secondary School Students Academic Performances.

After mapping the quality of the secondary school students academic achievement, identifying and finding their problems, it is important to provide some strategies to deal with the barriers or obstacles. The strategies include evaluation program, mentoring and tutoring, Collaboration between the school and university, and developing the students learning behaviors.

4.5.1. Evaluation Program Strategy

Measuring the students academic performance is crucial because it provides information about the students academic achievement as well as their level of knowledge and skills. One of the instruments to measure the students achievement is a test. Therefore, it is imperative that the students who have studied for one semester at the seventh grades be given *Early Detection Test* (EDT) to find out their competency on English, mathematic, and science. The reason of doing the EDT is that to see how much knowledge have been learned and mastered by the students. By doing so, the results of the EDT be used to identify the capable learners and weaker learners. The results of the tests can later be used to monitor or evaluate the students progresses at the eighth grades

4.5.2 Mentoring and Tutoring Support

The secondary school can facilitate the weaker and low students with mentoring and tutorial. Providing students with mentoring by capable teachers, adults, experts or peers is effective to develop the learners self confident, attitude, and awareness that can lead to boost the students academic achievement (Omwono G. A. & Katamei, 2015). In addition, mentoring support as well as community assistance are crucial to assist the students who may in a need

(Schneider, 2006). Another support is tutorial. The school should provide the students with tutorial assistance, particularly to the students who have not met the standart (passing grade) imposed by the Indonesian Ministry of Education and Culture (MOEC). The intended students will therefore be isolated and be trained in a special place/class with special teacher, mentor, or tutor. By doing mentorship and tutorial, it is expected that no students are left behind.

4.5.3. Collaboration between Secondary School and University

The department of education and culture should collaborate with the university to work hand in hand to improve the quality of secondary school students academic performance in Kendari city. Since the higher education has lots of excellent human resources that can be explored to help others who may in need, the university can therefore offer an intership to the students through mentoring or tutoring in the school. The instituton can regularly send its excellent students to provide assistances to secondary school students. By so doing, the students can work together with the secondary school students to deal with their English, mathematics, and science problems. The tutorial and mentorship are designed only for students who have learning difficulties in mathematics, English, and science.

4.5.4. Developing Students Learning Behavior

Identifying and facilitating students with learning behavior are necessary to assist students academic competences. Having a "growth mindset" and "grit" learning behaviors is crucial in academic settings. Growing mindset helps students to be open minded, hardwork, challenges, and willingness to take risks (Dweck, 2017). Furthermore, students need to be perseverance and resilience to face of challenge "grit." (Duckworth et al., 2007). Therefore, Hochanadel and Finamore point out that students benefit from teachers instruction on how to be persistence and be resilience in academic settings, it will develop the students' mindset and will improve grit to deal with any obstacles and barriers. Therefore, providing students with learning stories activities can lead to improve student mindset and self efficacy (Hochanadel, A. H. & Finamore, 2015). The activities include (a) a discussion of a problem or project, (b) the learning challenges and the degree of difficulty the problem/project presents, (c) the action the students chose that kept him or her engaged and working in the face of difficulty, (d) the way success with this problem/project was assessed, and (e) the extent to which the students was successfully (Carr, M. May, H. & Podmore, 1998). Another program is The 7 Mindsets: Ultimate Life Summit Program. This program assist secondary school self awareness, responsibility, relationship, and mindset (Polisrstok, 2017).

5. Discussion

The findings of the research reveal that assessing secondary school students academic performance, identifying their problems, and finding out the solutions (strategies) are crucial in academic settings. The term of assessment and evaluation are used interchangeably to measure the students academic achievement. The results of the achievement tests can therefore be used to find out how much knowledge or learning objectives have been achieved by the students

(Brown, 2003), to provide “resources, determine teacher pay, award school vouchers to students attending unsuccessful school, and decide whether a students may graduate from high school” (p.63). (Fisher & Frey, 2003), in addition, the formal assessment has been designed to evaluate the students academic outcome (Banks, 2005). The idea is that the evaluation has been designed as a mean to measure the quality of education in secondary schools as well as their students.

As far as the results of academic assessment (national test) are concerned, they indicate that the qualities of secondary school students in Kendari city are left behind. The scores reveal that the students competences on math, science, and English need to be upgraded. In other words, the students academic achievement on the subjects are not good. As a result, their low academic performance on math, science, and English can lead to negative consequences on their graduation and opportunities to access into higher educations (high school and university) as well as wider information. According to (Polistrstok, 2017), if secondary school students do not have comprehension on reading and math, the students will have two problems like failing to get college degree and loose of opportunities to participate in vocational training program, and finally they bring about negative effect on the country ‘graduate rate crisis’ (Balfanz et al., 2007).

The problem of students outcomes are correlated to each other. In other words, the quality of output is affected by the quality of input and process. There is popular adage saying ‘rubbish in - rubbish out.’ Therefore, it is imperative to notice that factors affecting students poor academic achievements include lack of teachers teaching working performance (Ree et al., 2018), some teachers academic background are not relevant with the subjects they are teaching in the secondary school (Suryana, 2017). Furthermore, Suryana points out that the teaching and learning process too much focused on theory and memorization, teachers centered, and the teaching and learning process do not cater for individual needs and wants. In addition to that, (Kusunun et al., 2018) found that community involvement have not well participated in secondary school in Kendari city. Their participations were only 9.1 %.

Planning and making some efforts and support to achieve the goals to succeed in academic setting are highly regarded and appreciated. Therefore, strategies like early detection test, tutorial, menthorship, university and secondary school collaboration, and growing the students grit and mindset are importants to enhance the quality of education. (Banks, 2005).

In regard to peer tutorial, therehave been lots of behavior and coqnitve approaches that can be used to develop the students endeavor and diligence, one of these approaches is tutorial. Evidence suggests that peer tutoring has 30 years been used to upgrade the academic achievement as well as social/behavior performance (Polistrstok, 2017). In addition, Wexler et. al, (2015) state that tutorial can be as a mean to assist students who have problems with their studying at secondary school (As cited in (Polistrstok, 2017), and in

terms of a language learning, the students benefit from the peer tutoring because they can use both mother language and English, reduce anxiety, develop self esteem, have real verbal exercise, and enjoy relax atmosphere learning condition. (Herrel & Jordan, 2004).

The concepts of ‘growth mindset’ (willing to struggle) and ‘gritty’ (sustain efforts) are crucials in academic settings. Students need to have both ‘gritty’ and have a ‘growth mindset’ because the two ideas can assit them to reach their academic dream in years to come (Polistrstok, 2017). By having the two concepts, the student is ready to face challenges, valued a hard work, and be a risk taker, and is open to study up-to-date knowledge (Dweck, 2017). Therefore, Enhancing adolescent mindset and gritty is completedly needed to facilitate their future academic development. It is important that secondary school teachers foster the students willingness to be a risk taker and be open minded to something new (Dweck, 2017). By so doing, the students are able to challenge new concepts and be perseverance to reach the ideas. (Polistrstok, 2017) points out that growing the secondary students’ ‘Gritty’ and ‘Growth Mindset are crucials since they can lead to better academic achievement.

6. Conclusion

Analysing secondary school students academic performances, finding out their problems, and providing the solutions (strategies) are crucials in academic settings. As far as the secondary school students academic performances are concerned, it is noted that measuring the students academic subjects like math, science, and English throughthe result of standardized tests (national exam) is aimed to evaluate and mapping their academic progress. Their levels of proficiency to the three subjects are significantly low. There are only handful of students could have achieved good academic performance. In other words, the students need to work on math, science, and English in order to upgrade their quality of the subject. Therefore, It is necessary that by analyzing and identifying the students poor of academic performances, can help us to evaluate how the curriculum has been applied in the school. The students poor academic performances have effects on learners self esteem, parents’ satisfaction, and can be hinders to the nations’ development. This research provides pedagogical, technical and behavioral strategies to iron out the learners obstacles on academic achievements. The strategies which include early detection test, mentorship or tutorial, collaborate with university, and growing students gritty and mindset. Therefore, knowing the students academic achievement, their academic problems, and facilitating them with solution and strategies that lead to the development of the students academic performance as well as nation development.

7. Recommendation and Limitation

The secondary school students academic performances on social and science are left behind. In other words, most of the students were not able to achieve the passing grade (55%0 determined by the Indonesian Minister of Education and Culture (MOEC). Therefore, it is imperative that the

education and cultural department, university, teachers, and stake holders try to deal with the problems by evaluating the program, providing mentorship and tutorial, facilitating collaboration with university, and developing the students learning behaviors. By implementing the proposed solutions (strategies), the students will achieve better learning outcomes in years to come. Since the research focuses on the teaching practice and learning behaviors, further research be focus on the issues of large class and affective point of views.

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