Correlation Between Accreditation And The Quality Of Schools/Madrasahs Education In Maluku Province

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ABSTRACT

Accreditation of schools/ madrasahs as an activity to assess the feasibility of programs in academic units based on predetermined criteria is one of the essential pillars in the schools' and madrasahs' education quality assurance system. Accreditation is expected to contribute to the improvement of schools/madrasahs' quality. A critical question in this regard is whether accreditation correlates with the quality of schools/madrasahs.

This research aims to examine the relationship between accreditation and the quality of schools/madrasahs. The research was conducted by involving high schools/vocational high schools/madrasah aliyah (SMA/SMK/MA) in Maluku Province that accredited in 2018 and 2019. Accreditation data was obtained from National Accreditation Board for Schools/Madrasahs (BAN S/M; Badan Akreditasi Nasional Sekolah/Madrasah) of Maluku Province. The school/madrasah quality data was obtained from 2019's Computer-Based National Exams (UNBK; Ujian Nasional Berbasis Komputer) data published by the Ministry of Education and Culture's Education Assessment Center. The data analysis used was descriptive analysis and simple correlation analysis.

For MA and SMK, the result was $r_count < r_table$, and for SMA, even though $r_count > r_table$, but $r_count < 2.0$. Thus, it can be concluded that there is no correlation between accreditation and the quality of education units. For SMA, the correlation between accreditation and SMA quality is very low (very weak). This result showed that accreditation could only be used to map the level of compliance with national standards. The results of accreditation can not justify the quality of schools/madrasahs.

Keywords

Accreditation, Schools/ Madrasahs Quality

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Introduction

The issue of education quality is an important issue and orientation that concerns every education unit. Improving the education quality is an ongoing effort and the focus of attention of schools' principals and teachers at every level of the education unit. This is understandable because each education unit certainly wants to produce graduates that have high quality and high competitiveness.

Quality relates to a measure of whether an object or thing is good or not. There are many opinions from various perspectives regarding quality. Deming argues that quality is conformity with market or consumer needs. A similar opinion was expressed by Feigenbaum, that quality is full of customer satisfaction. A product has quality if it can provide satisfaction to consumers, following what consumers expect of a product [1]. Referring to this opinion, education quality can be interpreted as an education condition by consumer standards or expectations. Education is said to have good quality if the management of education and educational products in the form of graduates have the competence expected by consumers or graduate users.

Education units carry out efforts to improve education quality by improving the input components and educational processes. The components of academic input, especially those related to study and learning, are identified by Ratumanan [2], as follows: (1) raw input, namely the condition of the subject of learning

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(learning person) in the initial situation (before learning and learning activities take place), (2) instrumental input, namely relating to the qualifications and facilities needed for study and learning activities to take place, and (3) environmental input, namely input from the environment around students, including the family environment, the community environment (social environment), and the school environment. Meanwhile, the education unit's academic process is related to the management of education, the learning process, and the assessment process. The improvement of the educational process will certainly contribute to improving the quality of education in education units. The education quality assurance system has been developed in connection with improving the quality of education in education units. The education quality assurance system in education units consists of an internal education quality assurance system and an external education quality assurance system (Manghani, 2011; Sanga & Ahn, 2014; Elassy, 2015., Dikdasmen, 2016; Sridana, et.al, 2018; Matovu, 2017, 2019). [3-9]. According to the Directorate General of Primary and Secondary Education [6], the SPMI is a quality assurance system that runs within the education unit and is run by all education unit components. Meanwhile, the SPME is a quality assurance system the government, local run by governments, accreditation bodies, and standardization bodies. One of the essential components of the education quality assurance system for education units is the Accreditation of Education Units [10-15].

Accreditation in education is the process by which an association or institution evaluates an educational institution or study program and officially recognizes that it has met or exceeded the requirements and criteria or education quality standards that have been previously set [16]. According to Article 1 paragraph (22) of Law Number 20 of 2003 about the National Education System, accreditation is an activity to assess a program and/or education unit's feasibility based on predetermined criteria. According to National Accreditation Board for Schools/Madrasahs (BAN S/M: Badan Akreditasi Nasional Sekolah/Madrasah) [17], schools/madrasahs accreditation is а comprehensive assessment process of the feasibility of an educational unit or program, the results then stated in the form of recognition and feasibility ranking published by an independent and professional institution.

Accreditation activities are expected to be a driving force. They can create a conducive atmosphere for the development of education, provide direction for sustainable quality assurance of schools/madrasahs, and strive to achieve the expected quality. The accreditation process is carried out openly to assist and empower education programs and units to be able to develop their resources to attain national education goals. Given the importance of accreditation to guarantee and control education quality, the government has established a National Accreditation Board for Schools/Madrasahs [18].

The existence of accreditation by BAN S/M will encourage education units to gradually and continuously make improvements to fulfill national education standards, including graduate competence standards, content standards, process standards, standards for educators and educational staff, standards for infrastructure, management standards, assessment standards, and financing standards. Improving all the national standards referred to in education units is expected to enhance education quality significantly.

An important issue that needs to be studied regarding the matter is whether there is a significant correlation between accreditation and the quality of education units. Does a well-accredited school has good quality education or not. This problem becomes important to study, referring to the many cases that schools with rank A accreditation have the quality of education that is not better than schools with accreditation rank below it. Assessing the quality of education does have many interpretations. The quality of education can be evaluated from the educational input aspect, the educational process aspect, including the implementation of learning, and the scholarly output aspect. In this study, the quality of education is assessed from the educational output aspect, assuming that a good educational process will certainly impact educational outcomes. Thus, the educational output can be used to justify the quality of education in educational units. One of the educational outputs that can be used as an indicator of the education unit's quality is the national exam results.

Research Methods

This research used a correlational research design. The research variables consisted of accreditation and quality of education units. This study's sample consisted of 154 high schools/madrasah aliyah/vocational high schools (SMA/MA/SMK) in Maluku Province that took part in accreditation and computer-based national exams (UNBK). Apart from SMA/MA/SMK that took UNBK (online), there are also SMA/MA/SMK that took the offline national exam (Ujian Nasional Berbasis Kertas dan Pensil; UNKP). The selection of educational units that participate in UNBK has made, considering that UNBK scores' validity is guaranteed to have high integrity. Also, UNBK scores are intended to avoid interpretation bias towards the quality of the education units. In this context, education units with higher UNBK scores can be justified that their quality is better than educational units with lower UNBK scores.

Accreditation data was obtained from the plenary results of Maluku Province's BAN S/M. In contrast, education quality data were taken from UNBK scores processed by the Ministry of Education and Culture's Education Assessment Center. In addition to this quantitative data, data from interviews with accreditation assessors were also collected in relation to school preparation assessments for accreditation and Maluku Province's BAN S/M management regarding accreditation and the follow-up on accreditation results. Data is also enriched through a review of accreditation documents and relevant research results.

The data was then analyzed using descriptive statistics. The determination of the accreditation category uses the BAN S/M reference, while the determination of the education units quality category uses the five scale conversion reference according to Ratumanan and Laurens [19], as follows:

Table 1.	Conversion	of Five Sca	le Values	in the PAP
		A		

Approach					
Interval Nilai	Hurup	Kategori			
$85\% \leq x$	А	Very High			
$70\% \le x < 85\%$	В	High			
$55\% \le x < 70\%$	С	Moderate			
$40\% \le x < 55\%$	D	Low			
x < 40%	Е	Very Low			

To test the significance of the correlation, a simple correlation analysis was used. If $r_{count} \ge r_{table}$, then H_a is accepted and it is concluded that there is a significant relationship between accreditation and the quality of the education unit. If, on the other hand $r_{count} < r_{table}$ then $H_{\rm D}$ is accepted. A narrative description was also carried out for a detailed discussion based on qualitative analysis results by

referring to the data obtained from the accreditation assessors.

Results And Discussion

From the results of accreditation from 154 SMA/MA/SMK sample, it was found that 32 education units (20.78%) were accredited A, 64 education units (41.56%) were accredited B, 48 education units (31.17%) were accredited C, and

10 education units (6.49%) are not accredited. According to the SMA, MA, and SMK categories, the distribution of accreditation results is presented in the following figure.

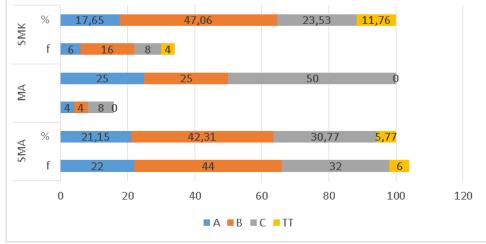


Figure 1. SMA/MA/SMK Sample Accreditation Results

Figure 1 above showed that 21.15% of SMA were accredited A; 42.31% were accredited B; 30.77% were accredited C; and 5.77% are not accredited. For MA, 25% were accredited A; 25% were accredited B, and 50% were accredited C. As for SMK, 17.65% were accredited A; 47.06% were accredited B; 23.53% were accredited C, and 11.76% are not accredited.

Meanwhile, suppose the SMA/MA/SMK's UNBK results are used as an indicator of the quality of the education units and by using the scale 5 conversion reference [19]. In that case, the results are shown in the following table

Table 2. Quality Conditions of the SMA/MA/SMK Referring to UNBK Results

Interval	Kategori	SMA		MA		SMK	
		f	%	f	%	F	%
85 ≤ <i>Score</i>	Very High	0	0	0	0	0	0
70 ≤ Scorø < 85	High	0	0	0	0	0	0
$55 \leq Score < 70$	Moderate	0	0	0	0	0	0
$40 \leq Score < 55$	Low	62	59,62	10	62,5	17	50
Score < 40	Very Low	42	40,38	6	37,5	17	50
Total		104	100	16	100	34	100

Table 2 above showed very concerning data. Not a single educational unit out of the 154 SMA/MA/SMK taken as the sample in this study was included in the category of a medium, high (good), or very high (very good) quality. All SMA/MA/SMK only included in the low (poor) and very low (very poor) quality categories. Furthermore, by examining these two variables together, the relationship between accreditation and the quality of the education unit descriptively can be seen. The data referred to is presented in the following table.

	Table 3. Data on A	Accreditatio	n and Quality	of the SMA	A/MA/SMK	
Accreditation	Quality of the S	— Jumlah				
Accreditation	Very Good	Good	Good Moderate		Low Very Low	
А	0	0	0	26	6	32
В	0	0	0	31	33	64
С	0	0	0	27	21	48
TT	0	0	0	5	5	10
Jumlah	0	0	0	89	65	154

Table 3 showed descriptively that the accreditation rank did not correlate with the quality of SMA/MA/SMK. Accredited A education units had low quality, not much different from accredited B and C education units, even with non-accredited education units. None of the accredited A education units had UNBK scores in the very good, good, or moderate categories. Likewise, none of them had UNBK scores in the very good, good, or moderate categories with accredited B education units. This

result showed that the accreditation ranking of education units d=oes not guarantee the quality of education units. This means that an accredited A (very good) education unit does not guarantee that the quality is also very good (A) or good (B).

Statistical analysis was carried out using the product-moment correlation to further study the relationship between accreditation and the SMA/MA/SMK education units' quality. The results of the analysis for each education units were presented in the following table:

 Table 4. Results of Correlation Analysis between Accreditation

 and Quality of Education Units

Education Units	Ν	⁷ count	n _{table}	Simpulan
SMA	104	0,1967	0,192	$H_{\rm p}$ was rejected, $H_{\rm a}$ accepted
MA	16	0,1028	0,497	$H_{\rm p}$ accepted, $H_{\rm q}$ rejected
SMK	34	0,2881	0,339	$H_{\rm D}$ accepted, $H_{\rm a}$ rejected

Table 4 above showed that for MA and SMK education units,

 $r_{count} < r_{table}$, this means H₀ is accepted, or Ha is rejected. Thus, it is concluded that there is no significant relationship between accreditation and the education quality of the education units. Whereas for high school education units, $r_{count} > r_{table}$, this means that H₀ is rejected or Ha is accepted. Thus, there is a significant relationship between accreditation and the quality of the education unit for high school education units. However, referring to the correlation coefficient interpretation table [20], r_{count} for SMA and MA education units is in the very low category (very weak), while r_{count} for SMK education units is in a low category (weak).

From the descriptive and inferential analysis above, it can be concluded that accreditation does

not positively correlate with the education quality of the education units. This result indicated that an increase in the score and rank of accreditation is not related to an increase in education quality. An increase in the score or ranking of accreditation does not guarantee an increase in an educational unit's educational quality score. In other words, the accreditation score or rank can not be used as a reference to justify the quality of the education unit.

Of course, this is contradicting the role of accreditation as an important component in the education quality assurance system. The education quality assurance system in educational units is presented in the following figure.



Figure 2. Quality Assurance System for Primary and Secondary Education Dikdasmen [6]

Figure 2 above showed the significant role of accreditation as a component of the external quality assurance system. Accreditation is expected to be an important pillar to encourage the fulfillment of national education standards in education units. All the education units are hoped to improve and meet all these educational standards to achieve a higher ranking in accreditation. The improvement of these standards will certainly impact the quality of inputs and the quality of the educational process, and in the end, it will impact the quality of graduates. This means that, theoretically, accreditation should be positively correlated with the quality of education. The higher the score or accreditation rank, the higher the education unit quality.

This study indicated no significant relationship between accreditation and the quality of education units, which implies that the education unit's accreditation has not been able to play an important role in the quality assurance system in improving the education unit's quality. The accreditation results at SMA/MA/SMK in Maluku Province can only be used to map the level of compliance with national standards. The accreditation results can not be used to justify the quality of schools/madrasahs in Maluku Province.

From interviews with BAN S/M administrators and school/madrasah's accreditation assessors in Maluku Province, from observations in several schools, and a study of accreditation documents, it can be identified that several weaknesses impact the inability of the accreditation system to play a role in improving the quality of education units. The weaknesses are as follows:

1. Accreditation has not been seen and positioned as an important pillar in the education quality assurance system by education units. In the education quality assurance system, the continuous improvement principle must be the focus of attention. The education unit must continuously implement quality assurance, consisting of quality mapping, compliance plan preparation, quality compliance implementation, quality evaluation/audit, and standard preparation.



Figure 3. Education Unit Quality Assurance Cycle [6]

The education unit should carry out a quality mapping in the accreditation preparation stage and then implement a quality assurance cycle to increase from the initial conditions. The accreditation visitation results should also be used as education quality data. At the end of the visit, the assessors will present important findings to be addressed by each education units. Likewise, the determination of the education accreditation results will include recommendations that need to be considered by the education unit in the education unit development stage. Following the results of the visit and the accreditation recommendations, the education unit again implements a quality assurance cycle, in the form of stages of planning, evaluation planning, and setting quality standards. If this is done continuously, it is hoped that the education quality will increase continuously. Thus, accreditation will be able to function as one of the education unit's quality assurance pillars. In these conditions, there will be a significant correlation between accreditation and the education unit quality.

2. Accreditation is more positioned by education units as an administrative mechanism in granting eligibility status. The education unit makes every effort to prepare all documents to face accreditation. After the accreditation process and accreditation ratings are obtained, the educational unit will return to the school management routine that was previously practiced. Many findings indicated that there are still many learning problems encountered in schools with good (B) or very good (A) accreditation rank.

Several findings showed that there are still some fundamental weaknesses in learning at schools/madrasahs, including:

a. Some teachers do not develop syllabus and lesson plans but imitate the other teachers' documents wholly. There are lesson plans prepared only as an administrative formality, so there are many weaknesses and incompleteness. Some teachers do not have syllabus and lesson plans documents to be used as references in learning.

b. Teachers have not been able to manage to learn well. Although in the lesson plans, the teacher plans to use a variety of student-centered learning models with a

scientific approach, but in the learning implementation, there is still a tendency for teachers to dominate learning by transferring knowledge; the knowledge construction process is neglected. The average score of the teacher's ability to carry out learning is 64.00, and it is in a sufficient category. The lowest component score is the use of learning media. Teachers have not been able to utilize communication and information technology in learning and have not been able to involve students in the use of media and learning resources.

c. Learning outcome activities have not been implemented correctly and in a structured manner. Teachers have not prepared an instrument to measure knowledge, attitudes, and skills completely. The teacher measures general attitudes by considering student activities, either class or group activities, without using any observation format.

[21-23]

3. Weaknesses of the accreditation system, especially concerning accreditation instruments.

Until 2019 there were still weaknesses in terms of accreditation instruments. The 2017 edition of the accreditation instrument, even though there have been many revisions, still measures more standard components that are administrative in nature. For example, to measure the competency standards of SMA/MA graduates, there are 7 (seven) points, the items 31 - 37, the competency aspect measured does not refer to competency tests or performance tests, but based on curriculum administration, including lesson plans and activities designed by schools. For example, items 36 and 37 as follows.

36.	pendeka pendidil pengala dalam/l (4) stud	nemiliki keterampilan berpikir kreatif, produktif, dan kritis, melalui atan ilmiah sebagai pengembangan dari yang dipelajari di satuan kan dan sumber lain secara mandiri, yang diperoleh dari aman pembelajaran dan kegiatan, meliputi: (1) kegiatan di luar kelas, (2) praktik di laboratorium, (3) penelitian sederhana, di wisata, (5) seminar atau workshop , (6) peragaan atau pameran mentasan karya seni.
	□ A.	Melaksanakan 7 kegiatan atau lebih
	□ B .	Melaksanakan 6 kegiatan
	□ C.	Melaksanakan 5 kegiatan
	🗆 D.	Melaksanakan 4 kegiatan
	🗆 E.	Melaksanakan kurang dari 4 kegiatan
37.	komuni yang di yang di (1) pen kegiata	nemiliki keterampilan bertindak secara mandiri, kolaboratif, dan katif, melalui pendekatan ilmiah sebagai pengembangan dari pelajari pada satuan pendidikan dan sumber lain secara mandiri, peroleh dari pengalaman pembelajaran dan kegiatan, meliputi: ugasan individu, (2) penugasan kelompok, (3) pelaporan tugas/ n, (4) presentasi hasil penugasan, (5) keterlibatan dalam iaan, (6) keterlibatan dalam berbagai lomba karya ilmiah.
	□ A.	Melaksanakan 6 kegiatan atau lebih
	🗆 В.	Melaksanakan 5 kegiatan
	□ C.	Melaksanakan 4 kegiatan
	D.	Melaksanakan 3 kegiatan

Figure 4. Example of Accreditation Instrument Items [24]

Measurement of creative, productive, and critical thinking skills is carried out by identifying activities designed by the education unit and followed by students. This, of course, has a relatively large measurement bias because (1) education units may manipulate administration as if carrying out these activities, (2) students involved in activities can only be a few people, meaning that many students do not follow these activities, and (3) participation in activities does not guarantee 100% achievement of competence. The same thing is illustrated in point number 37, which is a measurement of the skills to act independently, collaboratively, and communicatively.

BAN S/M recognizes the weakness of this accreditation instrument and process. Therefore corrective steps have been taken. According to BAN S/M [17], the National Accreditation Board for Schools/Madrasahs (Badan Akreditasi Nasional Sekolah/Madrasah; BAN-S/M) starting in 2018 has begun designing changes in the accreditation system, starting from the old paradigm shift to the new paradigm, from a compliance-based paradigm to a performance-based paradigm. Then, with this new paradigm, it has been reduced to an accreditation instrument based on both compliance and performance-based accreditation instruments. The instrument is named the 2020 Education Unit Accreditation Instrument (Instrumen Akreditasi Satuan Pendidikan; IASP), abbreviated as IASP2020.

4. There are various problems in fulfilling the national education standards relating to the education unit quality that the education unit has not yet accomplished. Maluku Province's BAN S/M [18] identifies various problems, as follows:

a. Curriculum development has not involved stakeholders to ensure the relevance of education to life necessities,

b. In making lesson plans and syllabus, teachers still adopt them from the internet/other schools. Meanwhile, there are still teachers in the syllabus preparation that adopt and adapt the existing syllabus for the standard process. Besides that, the quality of the lesson plans compiled by the teachers is not too good (tends to copy and paste).

c. The problems raised from the graduation competency standards are the teacher's distrust of students' ability resulting in added/boosting score, the low national exam (Ujian Nasional; UN) scores, and the student's lack of responsibility carrying out their assignments, and the lack of extracurricular activities.

d. Educators and education staff problems are that teachers still do not take advantage of effective time in the teaching and learning process. Some of the teachers do not have a competency certificate, and the number of subject teachers has not met the learning needs.

e. There is still a shortage of classrooms in remote areas for the standard of infrastructure, lack of student toilets, not following the number of students' ratio. The school fences are damaged/non-existent, impacting the school security level that is somewhat disturbed and less secure.

f. If viewed from the perspective of the Vision and Mission's standard management in the Work Plan and Requirement, it is not optimal. There is a lack of community role in schools.

g. Schools have not been able to provide adequate learning facilities, laptops, LCDs, etc.

h. For assessment standards, not all teachers understand the assessment mechanisms and procedures. Some teachers have not mastered the assessment according to the standards, and the national exam achievement is still below the national average.

Conclusions

From the description of the research results and discussion above, the conclusions are as follows:

The statistical presentation results showed that the 1 accreditation score or rank is not directly proportional to the education unit quality. Good quality education units do not follow education units with accreditation A or B. From the product-moment correlation analysis for MA and SMK, this research found that $r_{count} < r_{table}$. Although in high school education units the $r_{count} > r_{table}$, but the value of $r_{\text{count}} = 0.1967 < 0.200$ is in the very low category (very weak). Thus it can be concluded that there is no significant correlation between accreditation and the education unit quality. Even if there is a correlation, it is very weak. The accreditation results at SMA/MA/SMK in Maluku Province can only be used to map the level of compliance with national standards. The accreditation results can not be used to justify the quality of schools/madrasahs in Maluku Province.

2. There are several weaknesses concerning accreditation and its follow-up at the educational unit level. The weaknesses include:

a. Accreditation has not been seen and positioned as an important pillar in the education quality assurance system by education units

b. Accreditation is more positioned as an administrative mechanism in the context of granting status by education units.

c. There are weaknesses of the accreditation system, especially in relation to accreditation instruments.

There are various problems in fulfilling the national education standards relating to the education unit quality that the education unit has not yet achieved.

References

- [1] Nasution, M. N. (2005). Manajemen Mutu Terpadu. Bogor: Dahlia Indonesia.
- [2] Ratumanan, T. G. 2015. Belajar dan Pembelajaran. Yogyakarta: Pensil Komunika
- [3] Manghani, Kishu. (2011). Quality Assurance: Importance of Systems and Standard Operating Procedures. Perspectives in Clinical Research, 2(1), 34–37. Retrieved 24st September, 2020 from https://doi.org/10.4103/2229-3485.76288.

- [4] Sanga, P. L., & Ahn, M. L. (2014). Challenges and Opportunities for Quality Assurance of Cross-Border Higher Education: The Case of East Africa. Journal of Emerging Trends in Educational Research and Policy Studies, 5(1), 126-132. Retrieved 24th September, 2020 from https://pdfs.semanticscholar.org/70d2/ 6924d6773883116198896e62cc65199107 b2.pdf
- [5] Elassy, N. (2015). The concepts of quality, quality assurance and quality enhancement. Quality Assurance in Education, 23(3), 250–261. https://doi.org/10.1108/QAE-11-2012-0046
- [6] Direktorat Jenderal Pendidikan Dasar dan Menengah. 2016. Pedoman Umum Sistem Penjaminan Mutu Pendidikan Dasar dan Menengah. Jakarta: Direktorat Jenderal Pendidikan Dasar dan Menengah Kementrian Pendidikan dan Kebudayaan.
- [7] Sridana, Nyoman., Sudirman Wilian., & Dadi Setiadi. (2019). Sistem Penjaminan Mutu Internal di Satuan Pendidikan Menengah (SMA). Jurnal Pengabdian Magister Pendidikan IPA 2018, (1) 1, 45 51.
- [8] Matovu, Musa. (2019). An Analysis of Quality Assurance Key Performance Indicators in Research in Ugandan Universities. International Journal of Instruction. January 2019, Vol.12, No.1, pp. 1567-1584.
- [9] Matovu, Musa. (2017). The State of Internal Quality Assurance Systems in Ugandan Universities Issues, Opportunities and Challenges. European Journal of Education Studies, 3(8), 703-728. Retrieved 24st September, 2020 from https://oapub.org/edu/index.php/ejes/ article/view/983.
- [10] Adha, Maulana Amirul. Conny Benyamin, Imroatin Octaviarnis. Darmawan Thalib. (2018).Peran Akreditasi Dalam Penjaminan Mutu Pendidikan di Sekolah Dasar. Media

Manajemen Pendidikan. Volume 2 No. 2 Oktober 2018, 270-278

- [11] Mahdiannur, Muhamad Arif, (2018).
 Peranan Standar Mutu dan Akreditasi Institusi Pendidikan dalam Realita Masyarakat Indonesia. Retrieved 24st September, 2020 from https://www.researchgate.net.
- [12] Patil, Arun S., & Zenon J. Pudlowski. (2005). Important Issues of the Accreditation and Quality Assurance and a Strategy in the Development of an Accreditation Framework for Engineering Courses. Global J. of Engng. Educ., Vol. 9, No.1, UICEE Published in Australia, 49-58.
- [13] Astenia, Dewi., Rugaiyah., & Neti Karnati.
 (2019). The Evaluation of The School/Madrasah Accreditation Program Implementation in Kota Palembang. Indonesian Journal of Educational Review, Vol. 6, No.1, July 2019, pp 22-34.
- [14] Awaludin, P Aulia Ar Rakhman. (2017).Akreditasi Sekolah sebagai Suatu Upaya Penjaminan Mutu Pendidikan di Indonesia. Jurnal SAP Vol. 2 No. 1 Agustus 2017.
- [15] Setiyaningsih, Charisma Dewi. (2017). Status Akreditasi Dan Kualitas Sekolah di Sekolah Dasar Negeri. Manajemen dan Supervisi Pendidikan, Volume 1, Nomor 2 Maret 2017, 138–145
- [16] Ibrahim, Hassan Al-Haj. (2014). Quality Assurance and Accreditation in Education. Open Journal of Education. OJE 2014, 2(2), 106-110.
- [17] Badan Akreditasi Nasional Sekolah/Madrasah. (2020). Pedoman Akreditasi Sekolah/ Madrasah Tahun 2020. Jakarta: BAN S/M.
- [18] Badan Akreditasi Nasional Sekolah/Madrasah Provinsi Maluku. (2019). Laporan Akhir Pelaksanaan Program Akreditasi Sekolah/Madrasah Provinsi Maluku Tahun 2019. Ambon: BAN S/M Provinsi Maluku.
- [19] Ratumanan, T. G., & Theresia Laurens. (2015). Penilaian Hasil Belajar pada

Tingkat Satuan Pendidikan. Yogyakarta: Pensil Komunika.

- [20] Gravener, Frederick., & Larry B. Walnau.(2007). Statistics for the Behavioral Sciences. Wadsworth: Thomson.
- [21] Ratumanan, T. G. (2011). Masalah-Masalah Pengembangan dan Implementasi KTSP di Provinsi Maluku. Makalah. Disampaikan pada Seminar Sehari Pengembangan KTSP. Kanwil Kementerian Agama Provinsi Maluku. Hotel AMANS Ambon, 6 Agustus 2011.
- [22] Ratumanan, T. G. (2016). Inovasi Pembelajaran. Bandung: Alfabeta.
- [23] Ratumanan, T. G., & Yosep Tetelepta. (2019). Analisis Pembelajaran Matematika Berdasarkan Kurikulum 2013 Ppda SMA Negeri 1 Masohi. JUMADIKA Jurnal Magister Pendidikan Matematika, Mei 2019, Volume 1 Nomor 1, 25 – 34.
- [24] Badan Akreditasi Sekolah/Madrasah. (2017). Perangkat Akreditasi SMA. Jakarta: BAN S/M