The Analysis of Education Standards Achievement in The Internal Quality Assurance System (IQAS)

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Abstract—This study aims to determine the achievement of educational standards at IQAS which are implemented in private schools in the category of independent referral schools. The research was conducted with a qualitative approach with a case study design at the Lab School of State University of Malang, Indonesia. Data were collected from quality document analysis, observations, and in-depth interviews involving principal, teachers, students, committees, and parents of students. The indicators in the national education standards are used as a reference for analyzing the main components in the IQAS ecosystem. The results show that there are four standard performance categories, namely very good for the standard of graduate competence, process, and management; good for the standard of content and assessments; poor for the standard of educators and infrastructure; and very poor for the standard of educational personnel.

Keywords—quality assurance, national education standards, self-management, private schools, high schools

I. INTRODUCTION

There has been a lot of research on QA in the education sector, but along with the breadth of work and the rapid changes in the school system, it is necessary to study QA according to current needs. A relatively recent study was conducted by [3] who found that in Chile, using the Data Envelopment Analysis (DEA), private schools were considered to be more efficient and more capable of developing schools than public schools. In the Russian Federation, [4] shows that teachers are confused by the new standards being applied to QA for their schools. The results of research [5] in the United States concluded that the rubric formatted in QA must be in sync with quality improvement. From these studies, it can be concluded that QA involves many sides of the needs and is needed by many countries to improve and assess the effectiveness and efficiency of education policies.

In Indonesia, the use of QA in education is generally divided into two, namely QA for higher education [6] and primary and secondary education (Permendikbud No. 28/2016). The development of the QA system is carried out by a specially formed institution, namely the National Education Standards Agency (Badan Standar Nasional Pendidikan/BSNP), and at schools, it is also carried out by the Education Quality Assurance Agency (Lembaga Penjaminan Mutu Pendidikan/LPMP). BSNP has developed education standards which are nationally used as a reference for the operationalization of education through the school system (Government Regulation Number 13 of 2015 concerning National Education Standards). Meanwhile, LPMP acts as a controlling
institution that ensures the implementation of education standards and quality, both through its human resource training system and inter-school dissemination system.

Efforts to control the implementation of educational standards developed by LPMP are through the QA model called the Internal Quality Assurance System (IQAS) [7]. The purpose of IQAS is to ensure the fulfillment of educational standards in schools in a systemic, holistic, and sustainable manner so that the quality culture of each school grows and develops independently. For the implementation of IQAS in all schools to be optimal, at the initial stage, a school was chosen to be a model for implementing the quality assurance system. Furthermore, the model school will continuously impact IQAS to other schools. And so on until all schools in Indonesia can reach the quality standard of educational units.

So far, LPMP has selected several schools as model schools and impact schools. However, the selected schools are limited to public schools because the government will bear the funding for the implementation of IQAS for the early stages [8]. The problem is if the IQAS dissemination only relies on state schools with government funding, how can this happen quickly and thoroughly for all schools in Indonesia. This issue is very important to answer considering that the number of private schools is 138,277 almost equal to the number of public schools 169,378 [9]. There is no definite data which school is better quality, whether private or public schools, but several surveys indicate that quality private schools generally charge parents much higher than public schools with the same quality category [10]. This has prompted researchers to investigate how self-managed private schools are able to achieve quality schools and what components are barriers to achieving high quality.

II. LITERATURE REVIEW

Sallis has successfully developed QA in Total Quality Management (TQM) in education with a range of customer satisfaction-oriented components (internal and external) through measurement models and SWOT analysis [1]. One side of QA is important to be applied in the context of education because of the standard aspects of measurement and certainty for the implementation of professional, competitive and accountability processes [1], [3], [6]. Particularly in developing countries, QA is increasingly important because it serves as a reference for national policies in improving the quality of education and is driven by continuous internal assessments used to validate education accreditation [11]. Accreditation can provide public trust or trust and accountability. Through accreditation, reciprocal recognition of qualifications and facilitation of the mobility of academic personnel can be ensured. Through quality assurance, it will contribute to practitioners, teachers, and students in activities directed at improving professional preparation in education. In his research in Syria as a developing country, Ibrahim found the inherent dangers often encountered in educational institutions that have been accredited externally. This danger lies in placing a premium on document production, writing quality assurance plans and policy documents rather than implementing to ensure quality assurance is effective.

Gasperutz chooses ten indicators in QA to fulfill services including education, namely (1) timeliness of services, such as the period of education, (2) accuracy of service related to continuous rehabilitation of services and eliminating mistakes made in service, (3) politeness and friendliness, especially those related to direct services to the community, (4) responsibility related to receiving suggestions and handling complaints from the user community, (5) completeness regarding the scope of services and the availability of supporting facilities and service facilities which are interrelated and complement, (6) variations in service models, related to innovation, to provide new patterns in educational institution services, (7) ease of getting services, (8) personal services, related to flexibility, special handling for customers who need them, (9) convenience in obtaining services, and (10) other service support attributes [12].

In Indonesia, QA is a form of national policy which is interpreted by LPMP as IQAS implemented in schools [8]. SPMI was developed to ensure the quality of education based on eight national education standards as stated in the general provisions of Government Regulation Number 19 of 2005 and Government Regulation Number 32 of 2013, which are the minimum criteria regarding the education system, namely (1) graduation competency standards, (2) content standards, (3) process standards, (4) management standards, (5) financing standards, (6) infrastructure and facilities standards, (7) human resource standards, and (8) evaluation standards. The minimum criteria will also concern how education management is implemented so that it can be used as a reference in improving the quality of education management and in the end also becomes a parameter in evaluating school performance.

By describing the IQAS by referring to the national education standards, it is hoped that all schools have implemented it. Standardization of various aspects of education is an implication of efforts to reform education, which began with the promulgation of Law Number 20 of 2003 concerning the National Education System, and then followed by the issuance of Government Regulation Number 19 of 2005 concerning National Education Standards. At the same time, education reform has also been strengthened by policies to autonomic the management of education in schools. However, the
eight standard descriptions may be somewhat different from the six Unesco standard descriptions adopted by some developing countries [13] to mark the QA definition of education, namely learners, environment, content, processes, results, and responsibilities.

Not all schools can directly implement the IQAS to measure its quality, even though all schools have met the eight standards set by the BSNP. Therefore a gradual strategy is needed for the implementation of IQAS in all schools. Until now LPMP as a national school quality assurance institution has developed a model of IQAS dissemination between schools. However, the application method is still traditional, starting with face-to-face education and training for human resources (principals and teachers) [14], and followed by the appointment of model schools and impact schools. The dissemination method of IQAS designed by LPMP seems to contain several weaknesses, including (1) high dependence on substantial funds for the implementation of the Education and Training, (2) the loss of time for teachers to conduct face-to-face training outside of school, which should have been used at that time more focus on learning, and (3) absorption that may not be simultaneous for all school members, thus disturbing the school's readiness to conduct.

III. METHOD

The approach used in this research is qualitative with a descriptive exploratory type. The study of phenomena in education with a qualitative approach can be used to analyze the relationship between aspects so that holistically we can find trends in patterns and themes to be interpreted and interpreted [15]. The phenomenon of implementing IQAS in a school is not only a matter of how the school’s value dimension becomes a superior institution, but rather how the school is able to achieve the category of independent superior schools so that in turn it can become an example and a reference for other schools. This research is focused on in-depth descriptive analysis, especially the aspect of national education standards in the IQAS at the Lab School of the State University of Malang. Based on the LPMP assessment, it is a self-managed private school that has received a quality report card as a reference school or model school for the last five years.

The analysis of education standards at IQAS is carried out using the reference to eight national education standards listed in Government Regulation Number 19 of 2005 concerning National Education Standards, then translated into 29 quality indicators [8]. The data required in this study were collected through document analysis, interviews, and observations. Starting from the data on the quality report card documents obtained by schools from LPMP in East Java, then further tracking through observations and in-depth interviews with key informants, namely the principal and vice-principal, and triangulation complementary informants involving teachers, committees, and student representatives and parents of students. In-depth interviews are conducted as a technique that can increase the effectiveness and efficiency of research, especially in extracting data that requires data clarification/verification. In addition, there are also secondary data as a complement that is collected using the analysis of other IQAS documents, including a summary of the quality book assessment, a decision letter to form a quality implementation team, and photos of activities related to IQAS. Observation techniques to complement the field data that were carried out when this research took place. Observation is needed to see firsthand activities related to IQAS as well as something that is considered to have quality in providing good educational services for students, parents, and the wider community.

Data analysis was carried out in stages, namely first starting from the results of data analysis in quality report cards, then tracking the data in-depth on important findings for interactive analysis. Analysis of the quality report card document was carried out by making four categories (very good, good, poor, and very poor) on the quality development for two years (2017 and 2018) as the quality samples studied. Meanwhile, interactive analysis is carried out to further study important findings in relation to the aspects studied. The collected data is coded, then reduced, summarized, the main things are selected so that the pattern of relationships between aspects can be found [16]. The selection effectiveness of the findings can be assisted because they are carried out with the help of information technology devices, namely N-Vivo [17].

IV. RESULT AND DISCUSSION

Lab School of the State University of Malang is a private school in Malang city under the auspices of the Malang State University Foundation. Lab School of the State University of Malang is a school from a few private schools that have received recognition from LPMP as a school that has successfully implemented IQAS independently, at least in the last five years. This recognition is then explored in this study as an independent reference school and is likely to impact the experience of quality achievement in other schools.

Based on the results of the analysis of the quality report card document, the achievements of the eight national education standards were classified into the categories Very Good (VG), Good (G), Poor (P), and Very Poor (VP) as in Table 1.

Based on Table 1, it can be concluded that there is a consistency of quality achievement in the two years observed (2017 and 2018). Judging from the
categorization, it appears that there is a distribution from the highest level (VG) to the lowest level (VP). However, of the 29 indicators spread across 8 standards, it can be summarized that 20 indicators (70%) have achieved VG and G achievements, while 9 indicators (30%) have achieved achievements in the P and VP categories.

Based on the distribution of standards and indicators, it can be said that there are standards and indicators that tend to get high achievement, namely graduate competency standards, content standards, process standards, assessment standards, and management standards. Meanwhile, the outcomes that tend to be low are the standards of educators and education personnel and the standards of facilities and infrastructure.

What is interesting about the results of this study is that there are consistent quality achievements that tend to be high (G and VG achievements) at graduation standards, process standards, and management standards, on the other hand, there are standards that are consistently low in quality (P and VP categories), namely the teacher standards, and educational staff as well as standard facilities and infrastructure. This finding is the core of which is further discussed because it is intended to gain experience in formulating tips and strategies that need to be taken by private schools in a series of achieving standards of excellence through self-management compared to public schools [18]. The discussion is increasingly interesting when it is associated with the school level (Senior High School) which in school-based management policy needs to focus on efforts to achieve school excellence [19], [20] and efforts to develop quality in core schools and impact schools [21].

A. The key to quality lies in the competency standards of graduates, processes, and management

Based on Table 1, the achievement of graduate competency standards, processes and management are categorized as VG. In the education delivery ecosystem, graduate competency standards are the initial key for school staff to be creative and act because of their position as the parent of several existing standards. Based on the results of N-Vivo R1 analysis through the presentation of the Word Frequency Word Cloud based on Figure 1, it shows that the main subject in educational standards in schools is students, while the activities are focused on learning. Students as the main subject in the standard implementation data are reflected in the competence of graduates.

### TABLE I. ACHIEVEMENT VALUE & NATIONAL EDUCATION STANDARDS FOR LABSCHOOL OF STATE UNIVERSITY OF MALANG

<table>
<thead>
<tr>
<th>Standard/Indicator</th>
<th>2017 Achievements</th>
<th>2018 Achievements</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>Standard/Indicator</td>
<td>Category</td>
</tr>
<tr>
<td>A. Graduate competence standard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Attitude</td>
<td>6.99</td>
</tr>
<tr>
<td>2.</td>
<td>Knowledge</td>
<td>4.21</td>
</tr>
<tr>
<td>3.</td>
<td>Skill</td>
<td>6.94</td>
</tr>
<tr>
<td>B. Content Standards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Learning Media</td>
<td>5.43</td>
</tr>
<tr>
<td>2.</td>
<td>Curriculum Development</td>
<td>6</td>
</tr>
<tr>
<td>3.</td>
<td>Implementation of the Curriculum</td>
<td>6.33</td>
</tr>
<tr>
<td>C. Process Standards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Learning process</td>
<td>6.87</td>
</tr>
<tr>
<td>3.</td>
<td>Authentic Monitoring and Assessment</td>
<td>6.65</td>
</tr>
<tr>
<td>D. Educational Assessment Standards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Assessment Aspects</td>
<td>6.86</td>
</tr>
<tr>
<td>2.</td>
<td>Assessment Techniques</td>
<td>6.48</td>
</tr>
<tr>
<td>3.</td>
<td>Educational Assessment</td>
<td>6.6</td>
</tr>
<tr>
<td>4.</td>
<td>Assessment Instruments</td>
<td>6.31</td>
</tr>
<tr>
<td>5.</td>
<td>Assessment Procedure</td>
<td>5.86</td>
</tr>
<tr>
<td>E. Educators and Education Personnel Standards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Availability of Teachers</td>
<td>6.62</td>
</tr>
<tr>
<td>2.</td>
<td>Availability of Principals</td>
<td>2.1</td>
</tr>
<tr>
<td>3.</td>
<td>Availability of Administrative Personnel</td>
<td>5.04</td>
</tr>
<tr>
<td>4.</td>
<td>Availability of Laboratory Assistants</td>
<td>0</td>
</tr>
<tr>
<td>5.</td>
<td>Availability of Librarians</td>
<td>0</td>
</tr>
<tr>
<td>F. Education Management Standards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Management Planning</td>
<td>6.77</td>
</tr>
<tr>
<td>3.</td>
<td>Implementation of Leadership Duties</td>
<td>2.18</td>
</tr>
<tr>
<td>G. Standard of Facilities and Infrastructure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Capacity</td>
<td>4.77</td>
</tr>
<tr>
<td>2.</td>
<td>Learning Facilities and Infrastructure</td>
<td>1.59</td>
</tr>
<tr>
<td>3.</td>
<td>Supporting facilities and infrastructure</td>
<td>3.41</td>
</tr>
</tbody>
</table>

### H. Education Financing Standards

<table>
<thead>
<tr>
<th>Source</th>
<th>The 2019 Lab school Quality Book which is further traced through in-depth interviews and field observations</th>
<th>Score</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>Operating Expenses</td>
<td>7</td>
<td>VG</td>
</tr>
<tr>
<td>3.</td>
<td>Fund Management</td>
<td>4.28</td>
<td>P</td>
</tr>
</tbody>
</table>
Criteria have been set to meet the qualifications of graduate competencies as the minimum standard for determining the knowledge and skills of students which in the Bloom dimension reflect the Higher-Order-Thinking (HOT) ability for Senior High Schools [22]. Graduates' competence in many kinds of literature is measured as student achievement which is generally positioned as an outcome variable in the unified school system [23], which is different from the new paradigm in the school-based management system which places student achievement listed in the vision and mission as the determining variable, to choose a learning strategy [24]. In this context, student achievement is used as input for determining change strategies in the school organizational system.

The second key to quality is process standards, which are directly related to the implementation of learning or organizational learning [23]. Implementation and achievement of process standards are carried out in an interactive, inspiring, fun, participatory manner based on graduate competency standards. The implementation of the standard process is carried out by the teacher by referring to the syllabus that has been developed, leading to the achievement of competencies, compiling a complete and systematic plan document which is then approved by the principal and school supervisor. This is in line with the thought Hossain, that the quality assurance system with New Public Management (NPM) which further emphasizes the autonomy of school-based management in low-income country schools still depends on external monitoring, which in this context the approval of external supervisors on teacher performance [25].

There is a method that delivers the achievement of high process standards, namely the existence of a development team (quality team) that is specially formed at the school level. This reflects the existence of self-managed QA in school-based [19]. The quality team reflects the independence and autonomy of the school which always seeks the potential to raise the “prestige” of the school through the student learning process, school promotion, and curricular activities. Unfortunately, in the researcher's observation, the quality team lacked in presenting innovations related to learning strategies as a core component of the learning process [23].

The third key to quality is management standards. This is following the mandate of Government Regulation Number 19 of 2005 and Number 13 of 2013, namely Education Management Standards covering criteria regarding planning, implementation, and supervision of educational activities at the educational unit level. Achievement of management standards observed in investigations by researchers, a high contributor is the principal's good performance in carrying out leadership tasks and managing management information systems. In school-based management in private schools, self-managed independence is reflected in the vision, mission, clear objectives that translate into school programs that are more on administrative aspects and more on conflict reducer [26]. Some of the programs that appear to stand out are student service activities, the empowerment of educators and education personnel who are often overloaded and collide with, and partnerships with the community. All program activities are listed in the academic calendar. This provides information that there is a guarantee that activities will be carried out within a certain time. The relationship between passing standards, processes, and management can be further analyzed linearly [27]. The term graduate competency as referred to in the national education standards is difficult to find in the literature. But from tracing studies, the indicators in the intended standards reflect student outcomes and achievements. The results of Huitt, Huitt, Monetti, & Hummel's review of 800 variables with meta-analysis showed that student achievement was the outcome variable. Although the new frame of mind seeks to reverse the position of student achievement as a simultaneous reference (both at the grade, school, and environmental levels) to determine school reform efforts, in practice it reflects that changes in outcome variables (student and/or school achievement) are directly proportional to the effect of changes in content, the management or process variables. This shows that in the systems approach, the key to QA depends on the relationship of two determining variables, namely the first process and management, and the two outcome variables.

B. The existence of educational personnel standards

The results of this study indicate that the achievement of the personnel support standards at the school understudy is categorized as VP. The VP assessment should be given because the school does
not have librarians and laboratory assistants. As is known in the Regulation of the Minister of National Education Number 26 of 2008 that librarians and laboratory assistants are very strategic to improve the quality of education and provide excellent service to students. The existence of these two personnel support was not found in the schools studied. Library services are carried out concurrently by teachers, as are laboratory services. It is predicted that this kind of phenomenon can be found in other schools, especially private schools. This is evidenced by [28] which strengthens the government's statement that there are very few schools with adequate librarians.

The existence of librarians in schools needs to be debated. Referring to UNESCO (2006), school library policies should not be written by librarians alone but must involve teachers and senior management. This statement is also strengthened by Government Regulation No. 24/2014 which states that "school libraries are an integral part of learning activities". Therefore it is necessary to review the description of indicators that require librarians as part of the education quality standard [28]. The description of indicators about librarians should be integrated into the role of the teacher as a learning facilitator, which in this case is not found in the quality guidebook guided by the school.

The same includes laboratory assistants. According to the Regulation of the Minister of State for the Utilization of State Apparatus and Bureaucratic Reform No.03 / January / 2010 and the Joint Regulation of the Minister of National Education and the Head of the National Civil Service Agency Number 02 and Number 13 of 2010, the Education Laboratory is an academic support unit in educational institutions. The existence of laboratories is increasingly felt to be important, especially in schools that provide learning services in the field of science, so that laboratory assistants in school laboratories can provide learning resources that cannot always be found in everyday life [29]. For this reason, the existence of laboratory assistants who have the main competences of personality, social competence, administrative competence, and professional competence [30].

A deeper analysis of the absence of these two education personnel in schools, so that the quality report cards are categorized as VP does not mean that the school views their existence as not urgent, but more because of two reasons. First, because the recruitment of human resources is not determined by the school but depends on the school funding sponsor foundation. Second, there is an assumption that the duties of librarians and laboratory assistants are an integral part of the learning facilitation activities, so it can be interpreted that the implementation of their duties is integrated with the duties of the teacher in learning activities. If this is the case, then the consequence is that there is a need for a description of the indicators of library and work tasks which are integrated with the professional duties of teachers in more detail and operation.

C. Indicators of facilities and infrastructure standard must pertain to learning

Standard of facilities and infrastructure as described in quality report cards include capacity, learning and supporting facilities and infrastructure. It is explained in the quality guide that the scope includes facilities and media that support learning, for example study rooms, sports venues, places of worship, libraries, laboratories, play facilities, and so on. The results of observations by researchers in the field indicate that schools have complete facilities and infrastructure (available). But in the report cards the standard quality of facilities and infrastructure is assessed as P, and has no effect on the decline in the value scores in the quality report cards.

In the investigation, the researcher shows that there are two things that need to be discussed from the results of this study. First, is it true that the existence of facilities and infrastructure is not the key to the quality of schools, and second, why the assessment obtained is P, even though its existence is available (in sufficient numbers). In school facilities and infrastructure standard, the school has adequate capacity for school capacity, has complete and proper learning facilities and infrastructure, and the school has complete supporting facilities and infrastructure.

Understanding of facilities and infrastructure are often ambiguous for educational practitioners and evaluators. Facilities should be interpreted as tools that are used directly in learning activities and at the same time as teaching aids and learning resources, while infrastructure as facilities that must be available as a prerequisite for implementing learning activities [31]. Referring to this understanding, the standardization of facilities and infrastructure is not sufficient if it only includes the criteria for the presence or absence of facilities and infrastructure, but must show the criteria for functional usability in a series of learning activities. The standard of use or functionality of facilities and infrastructure is generally difficult to maximize by private schools compared to public schools, because transporting consumables and maintenance which are generally considered less strategic for private schools.

In the standard of existing facilities and infrastructure owned by schools, the researchers observed that the function was less than optimal due
to the absence of periodic repairs and maintenance. Of course this requires costs that often cannot be done by schools independently, for which private schools need to follow the mechanism determined by school funders, namely the foundations.

V. CONCLUSION

The results of document analysis and tracking on the IQAS show that SMA Labschool of State University of Malang has various scores from VG to VP. As a private school that implements school self-management, it is necessary to know the types of standards for the highest quality contributor in QA to become a reference for other schools. In this regard, student achievement standards (graduate competency standards), process standards, and management standards determine QA as a school quality. On the other hand, to develop an assessment strategy, it was identified that the standards of education personnel (librarian and laboratory assistant) need to be reviewed in relation to being integ (untergul di Kota Bandung), p. 83, 2014, doi: 0.1007/s40299-013-0609-7. Thanks are conveyed to The State University of Malang as a grant giver, SMA Laboratorium UM has given permission as a research location, the principal and all informants who are willing to provide accurate data.

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