Effectiveness of Quality Management Implementation ISO 9001: 2008 at State Vocational School 1 Gorontalo

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Abstract—This study aims to find out (1) how effective is the student field, (2) how is the effectiveness of the curriculum field, (3) how is the effectiveness of the field of public relations, and (5) how is the effectiveness of the field of administration and staffing in the implementation of ISO 9001: 2008 quality management in SMK Negeri 1 Gorontalo. This study uses descriptive quantitative methods. The population and sample in this study were 60 teachers and then collected through a data analysis questionnaire using percentage techniques. The results of the study are: 1) the field of student affairs in the implementation of ISO 9001: 2008 quality management in all countries 1 Gorontalo has been in a very good category. 2) Curriculum field in the implementation of ISO 9001: 2008 quality management in all countries 1 Gorontalo has been in a good category. 3) The field of facilities and infrastructure in the implementation of ISO 9001: 2008 quality management in all countries 1 Gorontalo has been in a very good category. 4) The field of public relations in the implementation of ISO 9001: 2008 quality management in all countries 1 Gorontalo has been in a very good category. 5) The field of administration and staffing in the implementation of quality management ISO 9001: 2008 at SMK Negeri 1 Gorontalo has been in a very good category.

Keywords—Effectiveness of Implementation, Quality Management ISO 9001: 2008

I. INTRODUCTION

The policy of the Directorate of Vocational Development in the Vocational Secondary Education Development strategy that leads to National and International Standard Vocational Schools through a policy of repositioning vocational secondary education needs to be responded proactively through various efforts to improve and develop comprehensively the quality of vocational education. One standard that can be applied to become an international standard school is to meet the ISO requirements especially the ISO 9001: 2008 Quality Management System (QMS). To obtain the certificate, the school must demonstrate an integrated teaching and learning process between theory and practice, service to students, parents, and community, including business and industry and government. The implementation of ISO 9001: 2008 is oriented towards improving the quality of service so that it is expected to satisfy educational customers, which in turn has an impact on improving the quality of schools and the quality of education nationally in Indonesia.

Based on the results of preliminary observations made at Gorontalo State 1 Vocational High School shows from year to year the interest (interest) of the community to register at SMK Negeri 1 Gorontalo is increasing, this is partly due to the absorption of graduates of SMK Negeri 1 Gorontalo in the world of work, academic achievement (intracurricular) and extra curricular through productive, creative and innovative breakthroughs, as ICT centers and ECT in Gorontalo Province. In 2006 SMK Negeri 1 Gorontalo established a commitment to achieve the title as an ISO-certified SMK, namely a certificate of recognition from the world organization about quality assurance for the implementation of training and learning which currently consists of more than 50 countries. Until the 2007/2008 school year, SMK Negeri 1 Gorontalo has and still can maintain the ISO 9001: 2000 QMS Certificate. This fact shows that the organization and management of this school are in accordance with international standards. The implementation of ISO 9001: 2008 quality management at Gorontalo 1 State Vocational School which was submitted starting in February 2010 there are many problems that become obstacles to its implementation in the form of management commitment and consistency in implementing the quality management system so that the achievement of predetermined quality targets still have not reached 100%. This is due to the commitment and consistency in implementing the ISO 9001: 2008 quality management system. Other evidence is also obtained from the Internal Audit report that there are several records for 5 work units namely Archives, Guidance and Counseling, Facilities and Infrastructure (Sarpras), Expertise Competencies, and Libraries. However, most of them are only suggestions from supervisors and are included in the minor category, which is related to suppliers in the work units of school facilities and infrastructure.

The challenge for SMK Negeri 1 Gorontalo that needs to be managed strategically in order to implement the implementation of quality management ISO 9001: 2008 is related to quality dimensions, customer focus, leadership, continuous improvement, human resource management especially related to curriculum, infrastructure and libraries because in practice schools are also inseparable from the supporting and inhibiting factors in implementing the ISO 9001: 2008 QMS. Positive student perceptions are motivated by supporting factors and vice versa. By knowing the effectiveness of implementing ISO 9001: 2008 quality management, it is expected that schools can improve aspects
that are considered lacking by implementing tasks in the School. Measurement results are expected to be used by schools as a basis for formulating new policies. Thus, the goal of the ISO 9001: 2008QMSwill be well implemented. The implementation of the ISO 9001: 2008 quality management system is not something that is obtained in an instant, but is the result of the efforts of all parties in an organization. With various gaps and expectations above, illustrating that the analysis of the principal's decision-making process is important to do a research to find alternative solutions. The design in this study was formulated as follows: (1) How the effectiveness of student affairs in Quality Management Implementation ISO 9001: 2008 at SMK Negeri 1 Gorontalo. (2) How effectiveness of the curriculum field in the Implementation of Quality Management ISO 9001:2008 at SMK Negeri 1 Gorontalo. (3) How is the effectiveness of the infrastructure facilities in the Implementation of Quality Management ISO 9001: 2008 at SMK Negeri 1 Gorontalo. (4) How is the effectiveness of the field of public relations in the Implementation of Quality Management ISO 9001: 2008 at SMK Negeri 1 Gorontalo. (5) How is the effectiveness of the administration and staffing field in the Implementation of Quality Management ISO 9001: 2008 at the State Vocational School 1 Gorontalo.

A. Quality Management

According to Sallis (2006: 334), the definition of quality or quality can be viewed from two concept perspectives. First, the concept of quality is absolute or absolute; both concepts of quality are relative. In the concept of quality absolute quality refers to the nature that describes the good degree of an item or service that is produced or sold ok by a particular institution.

This is in accordance with Vincent Gaspersz's (2006: 2) opinion that Quality Management or Integrated Quality Management (TQM) is defined as a way to continuously improve performance in each operation or process, in every functional area of an organization, using all human resources and available capital. Quality management is a tool that allows education professionals to adapt to the forces of change that hit our nation's education system. (Arcaro, 2009: 1–2)

The definition above shows that quality management is a way to regulate, manage an organization both operationally and processes carried out from beginning to end in order to improve performance in a school organization by optimizing existing human resources and available capital, then management quality can be said as the right alternative to improve performance in an organization.

1) Basic Concept of Quality Management System ISO 9001: 2008

a) Definition of International Organization For Standardization (ISO)

The International Organization for Standardization, headquartered in Geneva, is an international standard non-governmental organization (NGO) which consists of representatives from national standards bodies. Every country that works together has produced more than 17,000 international standards for business, government, and the general public because with effective management, the school will become quality (Usman, 2007).

According to Rudi Suardi (2003: 22) explained that at first, the abbreviation of the name of the agency was IOS in English (International Organization for Standardization) or OIN in French (Organisation internationale de normalisation) before finally being determined using the ISO name, taken from Greek, isos which means the same. ISO was established on February 23, 1947, in Geneva, Switzerland.

The explanation above shows that the International Organization for Standardization (ISO) is an international federation of national standardization bodies that exist throughout the world, established with the aim to develop standards throughout the world and is an international organization authorized to issue standards, which are not product quality standards, but system quality and stability standards that are recognized by all countries.


ISO 9001: 2008 is a series of quality standards developed by a committee working under the International Organization for standardization (International Organization for Standardization). The aim of these standards is to improve the total quality of all businesses for the benefit of producers and consumers. (Bateman, 2008: 387)

ISO 9001: 2008 is an international standard for quality management systems that establish requirements and recommendations for the design and assessment of a quality management system. ISO 9001: 2008 is only a quality management system standard. However, it must be expected that the products produced by an international quality management system will be of good quality.

2) Implementation of Quality Management ISO 9001: 2008 in Schools

Researchers in conducting ISO 9001: 2008 research focuses on the field of education, where ISO 9001: 2008 in the field of education focuses on the management of processes carried out by schools rather than on product results because the school is not immobile in the production of goods. The main objective of implementing ISO 9001: 2008 is the management of process management in all aspects of activities carried out by the school, starting with the principal, teacher, production unit, school regulations, infrastructure, teaching and learning activities etc.

The explanation above agrees with Shutter and Crawson (Dorothea W. Ariani, 2002: 308) for educational institutions that implement ISO 9001: 2008 quality management systems.

a) 2.3.1 Standard Indicator for Implementation of ISO 9001: 2008 in Schools

ISO 9001: 2008 Quality management system requirements are the latest version, issued in November 2008. There are no new requirements in this ISO, but there are things that need to be considered in this latest version of ISO 9001 standard. With the publication of the ISO 9001: 2008 version, all accreditation certificates issued (new and certified) must refer to ISO 9001: 2008). This 2008 version

II. METHOD

The research design used in this study is a type of descriptive research. The instrument used in this study is in the form of a questionnaire. In order to operationalize this research variable, the research indicator can be analyzed through the following behaviors: 1) student field, 2) curriculum field, 3) infrastructure facilities, 4) public relations, 5) administrative and personnel fields. The population in this study was all teachers totaling 148 people consisting of 49 male teachers and 99 female teachers. While the sample part of the population that can be considered to represent the characteristics of a population. The number of population in this study is presented in the following table:

<table>
<thead>
<tr>
<th>NO.</th>
<th>GROUP TEACHER</th>
<th>EDUCATIONAL LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>&gt;S1</td>
</tr>
<tr>
<td>1</td>
<td>Normative teacher</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Adaptive teacher</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Productive Teachers</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>BP / BK teacher</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>Honor teacher</td>
<td>-</td>
</tr>
</tbody>
</table>

AMOUNT 3 138 7 148

\[ n = \frac{N}{N \cdot \sigma^2 + 1} \]

The sample in this study uses random sampling. While the sampling technique uses the formula from Taro Yamane or Slovin (in Riduwan, 2013: 95) as follows:

Information:
- N = number of population = 148
- \( \sigma^2 \) = precession (set at 10%)

Based on the formula obtained the following sample number.

\[ n = \frac{148}{148 \cdot (0.10)^2 + 1} = 59.68 \approx 60 \] Respondents.

Data collection techniques in this study are in the form of a questionnaire by providing a selection of questions with answers that are given. The questionnaire form was used was a direct questionnaire that was closed in a multiple choice form, and respondents were asked to choose one of the answers that were available.

The scoring process is carried out by making classifications and categories of answers to questionnaire questions according to the responses of respondents. Respondents answered questionnaire questions by crossing (x) the answers provided with the four possibilities available. Each respondent’s answer choice is given a score or weight that is arranged in stages based on the Likert scale. The score given to each question is as follows (Sugiyono, 2012: 136-137):

a. 4 = Always
b. 3 = Often
c. 2 = Sometimes
d. 1 = Never

The data analysis technique used in this study is descriptive with percentage techniques. Furthermore, the data that has been obtained is analyzed based on percentage descriptive (%) with a formula in the sense that each item in the questionnaire is made a table to obtain an overview of the percentage achieved in the questionnaire for each indicator and each alternative answer by creating a frequency table for each alternative answers to each item divided by the number of samples x 100, which are formulated as follows:

\[ P = \frac{f}{n} \times 100\% \] (Sugiyono, 2010: 107)

Where:
- \( P \) = Percentage
- \( f \) = Frequency of classification
- \( n \) = Number of respondents
- 100% = Fixed number

As for calculating the percentage in the form of scores, the formula is used:

\[ P = \frac{Sc}{Si} \times 100\% \] (Sugianto, 2010: 111)

Description:
- Pr = Percentage
- Sc = Achievement Score, which is the total score obtained.
- Si = Ideal score is the maximum number of scores that can be achieved

To find out the final results about the effectiveness of implementing ISO 9001:2008 quality management, the following success categories are used:

<table>
<thead>
<tr>
<th>Number</th>
<th>Percentage Range (%)</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>81 - 100%</td>
<td>Very good</td>
</tr>
<tr>
<td>2</td>
<td>61 - 80%</td>
<td>Good</td>
</tr>
<tr>
<td>3</td>
<td>41 - 60%</td>
<td>Pretty good</td>
</tr>
<tr>
<td>4</td>
<td>&lt;40%</td>
<td>Not good</td>
</tr>
</tbody>
</table>

(Sugianto, 2010: 107)

III. RESULT AND DISCUSSION

A. Research Result

1) Effectiveness of the student field in Quality Management Implementation ISO 9001: 2008 at SMK Negeri 1 Gorontalo

As for the effectiveness of the field of students in implementing Quality Management ISO 9001: 2008 at SMK Negeri 1 Gorontalo, namely:

a. The school sets a quality target that is the number of applicants> 500 new students. The research results of the school have determined the quality target, namely the
number of applicants> 500 new students, displayed in the results of the questionnaire analysis. The effectiveness of school-related student fields has set a quality target that is the number of applicants> 500 new prospective students shows that generally respondents who stated always numbered 29 people with the highest percentage of 48.33%, while those who stated often were 12 people with a percentage of 20.00%, sometimes as many as 19 people with a percentage of 31.67%, while respondents who said they never had any or 0%.

b. Selection of new student admissions uses report card requirements for the last three semesters in junior high school, academic test scores, psychological tests/health tests, and national examination scores. About the selection of new student admissions using report card grades for the last three semesters in junior high school, the academic competency test, psychological test / health test, and national examination scores, showed that generally, respondents stated always 25 people or 41.67% and often with a percentage of 31.67% (19 people), while respondents stated that sometimes 16 people or 26.67 % and never 0% (none).

c. The school prepares a program for student orientation to cooperate with principals, teachers, and students. About the school arranging the student orientation program cooperating with principals, teachers and students, shows that generally respondents stated always with the highest percentage of 53.33% (32 people) while those who stated often were 19 people (31.67%), sometimes as many as 9 people (15.00%), while respondents who said they were never 0% (none).

d. Selection of the teacher's OSIS sets the semester value standard for students who have good grades. The selection of OSIS administrators to set the semester value standard for students who have good grades, the respondents stated often with a percentage of 54.00% (20 people) while those who stated were always 9 people (24.32%), sometimes as many as 8 people (21.62%), while respondents who stated never 0% (none).

e. Commitment/ support/agreement from all school residents to implement the Student Code of Conduct. The commitment / support / agreement of all school residents to implement the Student Code of Conduct, shows that generally the respondent always stated that it was 50.00% (30 people), while stating se ring is as many as 19 people (31.67%), sometimes as many as 11 people (18.33%), while respondents who said never is 0% (none).

f. The school establishes a written program policy regarding the implementation of BP / BK for students. The School establish policies written program regarding the implementation of the BP / BK students, showed that in general respondents said always that 53.33% (3 3 people), while stating se ring is as many as 17 people (28.33%), sometimes as much as 11 people (18.33%), while respondents who stated never were 0% (none).


The results of the ISO 9001: 2008 quality management implementation effectiveness study in the curriculum field are shown in the questionnaire analysis results in the following tables:

a. The curriculum is tailored to the needs of students namely DUDI. The curriculum adapted to the needs of students, namely the business world and industry shows that generally respondents stated sometimes the percentage is always 43.33% (26 people) while those who say sometimes are as much as 36.67% (22 people), often 20.00% (12 people), while respondents who stated never were 0% (none).

b. National character education has been programmed in the syllabus and has been outlined in the Learning Program Plan (RPP) in all subjects, aiming to make students of noble character. About national character education has been programmed in the syllabus and has been outlined in the Learning Program Plan (RPP) on all subjects, aiming to make students of noble character show that generally, respondents stated always with the highest percentage of 46.67% (28 people) while those who stated often were 21 people (35.00%), while respondents who stated sometimes as many as 11 people (18.33%), respondents who stated never 0% (0 people).

c. Teaching productive subject matter has been held to synchronize curriculum between expertise programs with the Business / Industry World (DU / DI). Teaching productive lesson material has been held curriculum synchronization between expertise programs with the Business World / Industry (DU / DI) shows that generally the highest respondents stated often with the highest percentage of 43.33% (26 people) while those who stated always as many as 19 people (31.67%), while respondents who stated sometimes as many as 9 people (25.00%), respondents who stated never 0% (0 people).

d. Learning has used the introduction of English language, especially on productive learning material to support SMK Negeri 1 Gorontalo to become an international standard school. Learning has used the introduction of English language especially on productive learning material to support SMK Negeri 1 Gorontalo to become an international standard school.

374
people (28.33%), while respondents who stated never were 0% (0 people).

3) Effectiveness of Infrastructure Facilities in implementing quality management ISO 9001: 2008

a. Schools provide infrastructure that supports KBM in accordance with the standards of facilities and infrastructure schools providing infrastructure that supports KBM in accordance with the standards of facilities and infrastructure that generally respondents stated often with the highest percentage of 45.00% (27 people) while those who stated were always as many as 22 people (36.67%), sometimes as much as 11 people (18.33%), while respondents who stated never 0% (none).

b. Schools hold sufficient theory and practice rooms, representative teacher rooms and administrative spaces, extensive sports fields and entrepreneurial practice rooms.

setting learning objectives and selecting and developing learning materials that generally respondents stated always with the highest percentage of 64.86% (24 people) while those who stated often were 9 people (24.32%), sometimes as many as 4 people (10.81 %), while respondents who stated never 0% (none).

c. The school holds laboratory equipment in all skill programs, as well as adequate multi-media equipment.

about schools holding laboratory equipment in all skill programs, as well as adequate multi-media equipment that generally respondents stated always with the highest percentage of 70.27% (26 people) while those who stated often were 9 people (24.32%), sometimes as many as 2 people (5.41%), while respondents who stated never 0% (none).

d. Schools maintain school facilities and infrastructure and provide regular reports to the principal.

about schools maintaining school facilities and infrastructure and providing regular reports to principals that generally respondents stated always with the highest percentage of 50.00% (30 people) while those who stated often were 18 people (30.00%), sometimes-sometimes as many as 12 people (20.00%), while respondents who stated never 0% (none).

4) Effectiveness of the field of public relations in the implementation of quality management ISO 9001: 2008

a. Schools Socialize the school’s programs and excellence by presenting to several junior high schools in Gorontalo schools socializing programs and school excellence by presenting to several junior high schools in Gorontalo that generally respondents stated always with the highest percentage of 56.67% (34 people) while those who stated often were 18 people (30.00%), sometimes as many as 8 people (5.41%), while respondents who stated never 0% (none).

b. Schools provide information to the public about school provisions in carrying out learning

schools providing information to the public about school provisions in carrying out learning that generally respondents stated always with the highest percentage of 50.00% (30 people) while those who stated often were as many as 22 people (36.67%), sometimes as much 8 people (13.33%), while respondents who stated never 0% (none).

c. The standard procedure for a guest reception at school is done by allowing the guest to show their identity and purpose and purpose of attending school. The standard procedure for guest reception at school is done by allowing the guest to show their identity and purpose and purpose of coming to school that generally the respondent always stated that the highest percentage was 32 people (53.33%) while those who stated often were 16 people (26.67%), sometimes as many as 12 people (20.00%), while respondents who stated never 0% (none).

d. The School collaborates with Other Institutions from the government and companies as school work partners government and companies as school work partners shows that as many as 36 people or 60.00% of respondents stated always, 19 people or 31.67% of respondents stated often, 5 people or 8.33% of respondents said sometimes and 0 % of respondents who stated never.

5) Effectiveness of administrative and staffing fields in the implementation of quality management ISO 9001: 2008

a. Procedure manual or Operational Standard Procedure is made in carrying out the school administration function.

School making procedure manuals or Operational Standards Procedures in carrying out school administration functions indicate that as many as 30 people or 50.00% of respondents stated always, 22 people or 36.67% of respondents stated often, 8 people or 13.33% of respondents said sometimes and 0 people or 0% of respondents who stated never.

b. Management of student administration is carried out entirely by the school administration system in collaboration with teachers of inter-class guardianship student administration management is carried out entirely by the school administration in collaboration with the inter-class guardian teacher shows that as many as 31 people or 51.67% of respondents stated always, 19 people or 31.67% of respondents stated often, 10 people or 16.67% of respondents said sometimes, and 0 people or 0% of respondents who stated never.

c. The management of correspondence is done by collecting data on incoming and outgoing letters. The management of correspondence is done by collecting data on incoming and outgoing letters indicating that as many as 34 people or 56.67% of respondents stated always, 15 people or 25.00% of respondents said often, 11 people or 18.33% of respondents said sometimes and 0 people or 0% of respondents who stated never.

B. Discussion

Based on the results of research on the implementation of the Effectiveness of Quality Management of ISO 9001: 2008
The New Student Admission System has used techniques that support the achievement of the school's vision, among others: schools have set PPDB quality targets, namely the number of applicants> 500 new students. The new student admission techniques are as follows (1) Socializing the program and the excellence of schools by presenting to several junior high schools in the sub-districts of Gorontalo, and (2) In the new student admission selection using the requirements of report cards for the last three semesters in junior high school, academic competency tests, and increased student achievement from years to years in all subject areas.

ISO 9000 is not a product standard but is a standard of an organization's management system which when applied in the organization will affect how the product is produced, starting from the level of planning, design, manufacture, and assembly to delivery to customers. This is supported by Gaspersz (2001) which states that ISO 9000 is an international standard for SMM. ISO 9000 sets out the requirements and recommendations for the design and assessment of a QMS of an organization that aims to ensure the organization concerned is able to provide products that meet the requirements set.

The effectiveness of the implementation of Quality Management ISO 9001: 2008 can be seen from the field of student improvement in student report card grades for each grade level, an increase in the ranking of the average UAS score, the ability of students in an effort to increase school rankings in exemplary lesson tests, and increased student achievement from years to years in all subject areas.

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The data contained in the School Profile document and the researchers’ field observations include the Gorontalo State 1 Vocational School as follows: (1) Management: Having a needs analysis and fulfillment plan. (2) Building: Having sufficient theoretical space with the existing students, Headroom School, Educator Room, Language Laboratory, Productive Practice Room, Library, Bathroom / WC, Administration Room, Production Unit Room, Canteen Room, Sports Field, Worship Place, Parking Area, Adequate Recreation Place. (3) Infrastructure: Owning roads, availability of adequate numbers of types and equipment. (5) Equipment for each space is sufficient, and (6) Books: Availability of books sufficient for students and teachers. From the data above, sara and prarana have met the standards / feasible for management.

Furniture: Availability of adequate numbers of types and equipment. (5) Equipment for each space is sufficient, and (6) Books: Availability of books sufficient for students and teachers. From the data above, sara and prarana have met the standards / feasible for management.

### IV. CONCLUSION

From the results of the research and discussion in the previous chapter, conclusions can be made according to the research indicators, namely: (1) The Student Affairs in the Implementation of Quality Management ISO 9001: 2008 at SMK Negeri 1 Gorontalo has been in a very good category. (2) The Curriculum Field in the Implementation of Quality Management ISO 9001: 2008 in Schools have been in a very good category. (3) Infrastructure facilities in the implementation of ISO 9001: 2008 Quality Management in Schools have been in a very good category. (4) The field of public relations in the Implementation of ISO 9001: 2008 Quality Management in Schools has been in a very good category. (5) The administrative and staffing fields in implementing ISO 9001: 2008 Quality Management in Schools have been in a very good category.

### REFERENCES


