

Research Paper



Total quality management at vocational high schools

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ABSTRACT

This paper presents the implementation of total quality management at vocational high schools. TQM is used to manage the organization as a whole in order for the organization to achieve excellence in all products and services that are important to customers. An important note of this dimension is that quality covers the entire organization in everything the organization does and that quality is ultimately defined by the customer. The goal of improving product quality is customer satisfaction. TQM has the goal of continuous quality improvement, adapted to changes concerning the needs, desires, and tastes of consumers. TQM is the approach that today's organizations should take to improve the quality of their products, reduce production costs and increase productivity. TQM is an approach to doing business that tries to maximize the competitiveness of the organization through continuous improvement of products, services, people, processes, and the environment.

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1. INTRODUCTION

Total Quality Management (TQM) is called Integrated Quality Management as a system that is implemented in the long term and continuously to satisfy consumers by improving the quality of company products [1]. TQM is the integration of all organizational functions and processes in order to achieve the

goal of improving product quality, namely customer satisfaction. Vocational secondary education is education at the secondary education level that prioritizes the development of students' abilities to carry out certain types of work. Vocational secondary education prioritizes preparing students to enter the workforce and developing professional attitudes. In accordance with its form, vocational secondary schools organize educational programs that are tailored to the types of employment (Government Regulation Number 29 of 1990).

Vocational High School (bahasa: Sekolah Menengah Kejuruan (SMK)) is one form of formal education unit that organizes vocational education at the secondary education level as a continuation of junior high school, MTs, or other equivalent forms. Schools at the vocational education level and type can be named Vocational High School (SMK) or Vocational Aliyah Madrasah (bahasa: Madrasah Aliyah Kejuruan (MAK)), or other equivalent forms (National Education System Law Number 20 of 2003). SMK has many expertise programs. The expertise programs implemented in SMKs adjust to the needs of the existing world of work. The expertise program at the SMK level also adapts to the demands of the community and the market. Vocational education is secondary education that prepares students primarily to be ready to work in a particular field.

1.1. Total Quality Management

Total Quality Management is defined as a business strategy and is oriented towards customer satisfaction by involving all members of the organization [2]. Total Quality Management is defined as the integration of all management functions, all parts of a company and all people into a holistic philosophy built on the concepts of quality, teamwork, productivity, and customer satisfaction. Total Quality Management can be interpreted as an approach to doing business that tries to maximize the competitiveness of the organization through continuous improvement of products, services, people, processes, and the environment [3].

Total Quality Management is a management system that elevates quality as a business strategy and is oriented towards customer satisfaction by involving all members of the organization. So, it can be concluded that Total Quality Management is a systematic management approach that is oriented towards organizations, customers, and markets through a combination of practical fact finding and problem solving in order to create significant improvements in quality, productivity and other performance in the company [4].

The purpose of TQM implementation is to provide quality products or services that meet the needs and satisfaction of the consumer market on an ongoing basis (sustainable satisfaction) which in turn will lead to sustainable purchases so as to increase the productivity of producers to achieve economies of scale with a consequent decrease in production costs [5].

The implication of the above is that TQM must have a vision, mission, and ability to develop existing markets and be able to anticipate the needs of future products or services, which may not currently exist at all. The creativity and ability of management to create future markets is what can ensure the survival of the company as a leader or pioneer in the market.

In other words, the application of TQM in a company can provide major benefits that in turn increase profits and competitiveness of the company concerned [6]. What distinguishes TQM and other approaches to running a business are its components. The core components have ten main elements, namely: customer focus, obsession with quality, scientific approach, long-term commitment, teamwork, continuous system improvement, education and training, controlled freedom, and employee empowerment involvement.

Providing the best service to mankind is a very noble job and is a door to goodness. Allah's Word in Surah al-Maidah verse 2, meaning: O believers! Do not violate Allah's rituals 'of pilgrimage', the sacred months, the sacrificial animals, the 'offerings decorated with' garlands, nor those 'pilgrims' on their way to the Sacred House seeking their Lord's bounty and pleasure. When pilgrimage has ended, you are allowed to hunt. Do not let the hatred of a people who once barred you from the Sacred Mosque provoke you to transgress. Cooperate with one another in goodness and righteousness, and do not cooperate in sin and transgression. And be mindful of Allah. Surely Allah is severe in punishment.

The definition of Total Quality Management (TQM) is a management approach to an organization, focused on quality and based on the participation of all human resources and aimed at long-term success through customer satisfaction and providing benefits to members, the organization (its human resources) and society [7].

TQM is also translated as a customer-oriented approach that introduces systematic management changes and continuous improvement of an organization's processes, products, and services. The TQM process has specific inputs (customer wants, needs, and expectations), transforming (processing) inputs in the organization to produce goods or services that in turn provide satisfaction to customers (output) [8]. The TQM concept is based on work that is placed on professionalism and specialization. Therefore, everything related to quality control is only mastered by quality control specialists. If quality control is questioned to people in other divisions of a company or organization, other than quality control, people certainly cannot answer it [9].

(Quality management or Integrated Quality Management (Total Quality Management = TQM) is defined as a way of improving performance continuously (continuously performance improvement) at every level of operation or process, in every functional area of an organization, using all available human and capital resources [10].

TQM is a system that is currently being implemented by companies because it is considered capable of supporting managerial performance. TQM is also known as integrated management. TQM is defined as the integration of all management functions, all parts of a company and all people into a holistic philosophy built on the concepts of quality, teamwork, productivity, and customer satisfaction [11].

1.2. Implementation of TQM at Vocational High Schools

At Vocational High Schools, students can choose the field of expertise they are interested in. The SMK curriculum is made so that students are ready to work directly in the world of work. The curriculum content in SMK is arranged in such a way as to suit the needs of the existing world of work. This is done so that students do not experience significant difficulties when entering the world of work. With a study period of around three or four years, SMK graduates are expected to be able to work according to the expertise they have pursued.

The objectives of vocational secondary education according to Law Number 20 of 2003 are divided into general objectives and specific objectives.

The general objectives of vocational secondary education are: (a) increasing the faith and piety of students to God Almighty; (b) developing the potential of students to become citizens who are noble, healthy, knowledgeable, capable, creative, independent, democratic and responsible; (c) developing the potential of students to have national insight, understand and appreciate the diversity of Indonesian culture; and (d) developing the potential of students to have concern for the environment by actively participating in maintaining and preserving the environment, and utilizing natural resources effectively and efficiently.

The specific objectives of vocational secondary education are as follows: (a) preparing students to become productive human beings, able to work independently, fill existing job vacancies as middle-level workers in accordance with the competencies in the chosen expertise program; (b) preparing students to be able to choose a career, be resilient and persistent in competing, adapt to the work environment and develop a professional attitude in the field of expertise they are interested in; (c) equipping students with science, technology and art in order to be able to develop themselves in the future either independently or through higher education; and (d) equipping students with competencies in accordance with the chosen expertise program.



Figure 1. TQM at Vocational High School

Figure 1 shows TQM at vocational high schools. There are five aspects of TQM implementation in Vocational High Schools. The first aspect is the teacher's focus on students, which implies that the school should establish a good relationship with students [12]. In this aspect, students should define their needs while the school should interpret and fulfill the students' needs. Then the second aspect is the total involvement of all school members, which implies that all school members must be able to contribute to school quality. Furthermore, the third aspect is the measurement of teacher services, which implies that the commitment of all school members is needed to achieve better school quality [13]. For this reason, school leaders must support the change process by providing education, tools, systems and processes to improve school quality. At the same time, teachers and education personnel must do their jobs in accordance with their responsibilities [14]. Last but not least, the fourth aspect is the commitment of all school members while the fifth aspect is the improvement of teacher services. The fourth and fifth aspects imply that the school should perform each task better than it currently does [15]. All these aspects can be realized if all relevant parties cooperate fully, encourage both small and large-scale changes [16], and focus their attention on preventive efforts rather than breaker initiatives in brief, seeing the importance of TQM implementation in the context of vocational education [17], namely the identification of the effectiveness of teachers' focus on students and the level of student satisfaction, the total involvement of all school members (principals, vice principals, teachers, administrative staff and students), the measurement of teachers' services, the commitment of all school members (principals, vice principals, teachers, educational staff and students) and the continuous improvement of the quality of teachers' services [18].

2. CONCLUSION

The human resources expected by society come from quality schools. A quality school can be realized by implementing a quality assurance system. Therefore, the education sector must produce quality graduates by fulfilling the improvement of education management in schools, the availability of professional teaching staff, changes in school culture (vision, mission, goals and values), increased education financing, and optimization of community support for education. Therefore, quality education can only be realized through quality management. Looking at the situation, perhaps it is time for the total quality management (TQM) approach that has been adopted from the industrial domain to be implemented in the educational domain.

As a philosophy, TQM can serve as a guideline in the pursuit of continuous improvement. If TQM has been adopted and integrated into the education philosophy system, the education domain will be helped in improving the quality of each part and degree. The use of TQM has been effective in its application in the educational domain in both high school education and technical vocational education. TQM is the

process of integrating all activities, functions and processes into an organization to achieve continuous improvement in cost, quality, function, transportation and service for customer satisfaction. Various reorganization efforts towards performance with TQM concepts have been implemented by several countries. The goal of TQM is to provide quality products or services that meet the needs and satisfaction of the consumer market continuously which in turn will foster sustainable purchases so as to increase producer productivity with a consequent decrease in production costs. The implication of the above is that TQM management must have the vision, mission and ability to develop existing markets, as well as be able to anticipate the needs of future products or services, which may not currently exist at all. The creativity and ability of management to create future market needs is what will ensure the survival of the company as a leader or pioneer in the market. Embedding TQM culture in an organization is not easy because of the heterogeneity of the background of organizational members in terms of education, experience, culture and value traditions brought along. Therefore, the cultivation of TQM culture requires patience and tenacity because it takes a long time. However, this is a goal that must be achieved in order to improve the quality, productivity and competitiveness of the organization to survive in the arena of local, regional and global competition.

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Author Contributions Statement

Name of Author	C	M	So	Va	Fo	I	R	D	O	E	Vi	Su	P	Fu
Evi Amalia Setya Ningtyas	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓		✓	✓
Khusnuridlo	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓

C : Conceptualization

M : Methodology

So : Software

Va : Validation

Fo : Formal analysis

I : Investigation

R : Resources

D : Data Curation

O : Writing - Original Draft

E : Writing - Review & Editing

Vi : Visualization

Su : Supervision

P : Project administration

Fu : Funding acquisition

Conflict of Interest Statement

The authors declare that there are no conflicts of interest regarding the publication of this paper.

Informed Consent

All participants were informed about the purpose of the study and their voluntary consent was obtained prior to data collection.

Ethical Approval

Not Applicable.

Data Availability

The data that support the findings of this study are available from the corresponding author upon reasonable request.

REFERENCES

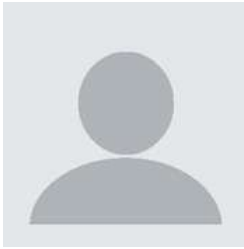
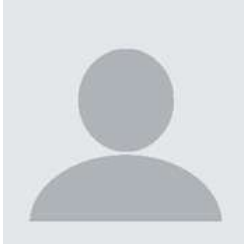
- [1] R. S. Rahayuningsih and S. Fajaruddin, 'The implementation of total quality management in

- vocational high schools', *Psychology, Evaluation, and Technology in Educational Research*, vol. 1, no. 1, pp. 31-40, 2018. doi.org/10.33292/petier.v1i1.20
- [2] T. Djuhartono, P. Ariwibowo, and L. A. Alhamidi, 'Implementation of Total Quality Management (TQM) on Teaching Factory (TEFA) Vocational Middle School in Bogor District', *Tarbawi: Scientific Journal of Education Management*, vol. 7, no. 02, pp. 269-282, 2021.
 - [3] D. Widiyono, 'Religiosity of Dominant in Factors Implementation of TQM Teachers: Study in Vocational School', in *6th International Conference on Science, Education and Technology*, vol. 2020, AtlantisPress, 2021, pp. 88-93. doi.org/10.2991/assehr.k.211125.019.
 - [4] N. Ngatiman and K. Supriyoko, 'Implementation of Total Quality Management (TQM) in Vocational High Schools (Analytical Study at SMK Karya Nugraha Boyolali Regency)', *Journal of Research of Social, Science, Economics, and Management*, vol. 1, no. 9, pp. 1483-1500, 2022. doi.org/10.59141/jrssem.v1i9.150.
 - [5] J. I. Jamalludin and S. Sarip, 'A TQM Implementation in Higher Education Institutions: A Review', *International Journal of Advanced Research in Future Ready Learning and Education*, vol. 25, no. 1, pp. 30-48, 2021. doi.org/10.37934/frle.25.1.3048.
 - [6] A. W. Khurniawan, I. Sailah, P. Muljono, M. Syamsul Maarif, and B. Indriyanto, 'Analysis of the effect of school governance and total quality management on the effectiveness of vocational school-based enterprises in Indonesia', *International Journal of Management*, no. 9, 2020.
 - [7] N. Lasiana and H. Hidayatulloh, 'Implementation of Total Quality Management (TQM) and Six Sigma in the Learning Process in Vocational High Schools', *Indonesian Journal of Education Methods Development*, vol. 19, pp. 10-21070, 2022. doi.org/10.21070/ijemd.v19i.652
 - [8] A. W. Khurniawan, 'The Collaborative Strategy of Total Quality Management and School Governance to Improving the Effectiveness of Vocational School-Based Enterprise Arie Wibowo Khurniawan* Illah Sailah Pudji Muljono Bambang Indriyanto', *J. Educ. Soc. Res*, vol. 11, no. 2, pp. 10-21, 2021. doi.org/10.36941/jesr-2021-0026
 - [9] K. I. Ismara, 'Implementation of Total Quality Management in Vocational High Schools', in *International Conference on Online and Blended Learning 2019*, AtlantisPress, 2020, pp. 246-250.
 - [10] A. W. Khurniawan, I. Sailah, P. Muljono, and B. Indriyanto, 'The Improving of Effectiveness School-Based Enterprise: A Structural Equation Modeling in Vocational School Management', *International Journal of Evaluation and Research in Education*, vol. 10, no. 1, pp. 161-173, 2021. doi.org/10.11591/ijere.v10i1.20953
 - [11] A. W. Khurniawan, I. Sailah, P. Muljono, and B. Indriyanto, 'An Analysis of Implementing Total Quality Management in Education: Success and Challenging Factors', *International Journal of Learning and Development*, vol. 10, no. 2, pp. 44-59, 2020. doi.org/10.5296/ijld.v10i2.17270
 - [12] A. W. Khurniawan, I. Sailah, P. Muljono, and B. Indriyanto, 'Strategy for Improving the Effectiveness of Management Vocational School-Based Enterprise in Indonesia', *International Journal of Education and Practice*, vol. 9, no. 1, pp. 37-48, 2021. doi.org/10.18488/journal.61.2021.91.37.48.
 - [13] S. M. Yuanita, A. A. Firawati, A. Cahyaningtyas, and A. Mangzila, 'Strategic Planning of Education in Total Quality Management State Vocational', in *The 4th International Conference on Education and Management (COEMA 2019)*, AtlantisPress, 2019, pp. 31-34.
 - [14] M. Ikhsannudin, 'Empowerment as A Quality Improvement Human Resources Through The Implementation of Total Quality Management', *Nidhomul Haq: Journal of Islamic Education Management*, vol. 6, no. 1, pp. 41-60, 2021. doi.org/10.31538/ndh.v6i1.1190
 - [15] R. N. Istriani and S. Rahardja, 'Implementation of quality management system of ISO 9001: 2015 at vocational high school Yappi Wonosari, Gunungkidul regency', *KnE Social Sciences*, pp. 478-485, 2019. doi.org/10.18502/kss.v3i17.4673.
 - [16] D. Luthfia and S. Sumarto, 'Implementation of Total Quality Management in SMK Negeri 10 Bandung', in *3rd International Conference on Research of Educational Administration and Management (ICREAM 2019)*, AtlantisPress, 2020, pp. 138-141. doi.org/10.2991/assehr.k.200130.156.
 - [17] H. Şenol, 'Preparing highly qualified pre-school teacher candidates in the light of total quality management: Pre-school teacher education in the light of total quality management', *International*

- Journal of Curriculum and Instruction, vol. 14, no. 1, pp. 728-750, 2022.
- [18] E. Hadiati, S. Setiyo, A. Dwiyanto, and A. Fradito, 'School Management in Total Quality Management Perspective at Bina Latih Karya Vocational School Bandar Lampung-Indonesia', Theory and Practice, vol. 28, no. 01, pp. 93-103, 2022.

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