

Research Article

Implementation of Total Quality Management in School Management: Cross Site Study at SMK Negeri 2 Banjarmasin and SMK Negeri 4 Banjarmasin

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ABSTRACT

This study aims to describe the implementation, strategy, and evaluation of Total Quality Management (TQM) in school management using cross-site methods. This research is descriptive qualitative research with primary data sources collected through observation and interviews and then analyzed using Miles and Huberman analysis. This research was conducted at SMK Negeri 2 Banjarmasin as Site I and SMK Negeri 4 Banjarmasin as Site II. This study aims to describe the implementation, strategy, and evaluation of Total Quality Management in school management using cross-site methods with the Principal, Deputy of Quality Management, and the School Development Team as key informants. The results showed that the implementation of Total Quality Management (TQM) at both sites was preceded by 1) planning that contains the size or standardization of quality to be used; 2) implementation of School Self Evaluation (EDS); 3) formulating and making the vision, mission and goals of the school as a guide; 4) preparation of School Work Plans (RKS), Medium Term Work Plans (RKJM) and School Activities and Budget Plans (RKAS); and 5) curriculum development. The strategy for implementing Total Quality Management (TQM) in school management begins with: 1) creating a Quality Development Team; 2) division of duties and responsibilities among team members; 3) alignment and strengthening of commitment; and 4) good human resource management. The evaluation carried out in the process of implementing Total Quality Management (TQM) in school management begins with: 1) internal evaluation; 2) evaluation of findings or non-conformities with existing standards; 3) budget evaluation; and 4) social control through evaluation of work culture and organization.

Keywords: Total Quality Management, TQM, Implementation, Strategy, Evaluation

Introduction

Educational institutions are required to be able to predict the changes that will occur and

meet the needs for quality implementation with the following characteristics: 1) move

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more actively based on their vision and mission, 2) always try to meet customer needs, 3) be proactive, 4) pursue power competitiveness, 5) members are committed to working, 6) members must be more active in trying, 7) the leader is committed, 8) the leader encourages members to always improve knowledge and skills relevant to the task, and 9) comprehensive design and implementation and control (Suriansyah, 2018). It means educational institutions are the service industries which are educators and instructors involved in it (Siregar et al., 2017). To manage schools in the face of changes in science and technology, SMK must always carry out improvements by always paying attention to internal and external factors. Technologies such as digital technologies in combination with big data and predictive analytics are having a significant impact upon professional practices at individual, organizational, national, dan international levels (Fenwick & Edwards, 2016). The changes in technologies have changed school's practices (Ilomaki & Lakkala, 2018). That is why, in school teachers' digital competence has been put in the spotlight (Olofsson et al., 2019) globally. It is part of improvement that increases community participation in the management of education systems (Masino et al., 2016) that is influenced by internal and external factors. One of the external factors that need to be done is quality approaches from industry and business, including Total Quality Management. Quality can be seen as the enhancement which means more than a continuous search for permanent improvement (Williams, 2016). Meanwhile, the development of a quality culture requires a balance between top-down and bottom-up approaches to promote the improvement of quality and coordinate individual efforts for a collective responsibility (Lucander & Christersson, 2020) which is in line with Total Quality Management or TQM.

Total Quality Management (TQM) is the development of the concept of quality assurance (quality assurance) that seeks to create a culture by encouraging all members of the organization to be able to satisfy students or external stakeholders which include students,

parents, government (central and local), the general public, and special communities (such as the business world and the industrial world) (Sani et al., 2015). TQM is one of the key determinants of the survival of the company (Topalovic, 2015) which can be seen as a revolutionary concept in the management of quality (Tapiero, 1996) that is accepted by scholars as a comprehensive philosophy for improving organizational performance (Dabestani et al., 2014). It is identified as the key driver of organizational performance in public and private organizations (Alghamdi, 2018). TQM is the holistic management approach that incorporates all the organizational activities to satisfy customers' needs and achieving overall organizational objectives. Hence, it can be seen that TQM is a firm-wide management philosophy of continuously improving the quality of the products, services, and processes by focusing on the customers' needs and expectations to enhance customer satisfaction and firm performance (Sandikoglu & Olcay, 2014). All components must be based on values, norms, and culture which are formulated in the form of a vision, mission, and several goals that must be understood by all members involved in it. Implementation of Total Quality Management can be standardized to ISO 9001: 2008 and the PDCA pattern. TQM improves educational organizations in many ways, such as improving the education process, making the educational environment motivating, improving educational curriculum, boosting the speed of training services, and reducing costs (Arkorful & Abaidoo, 2014). It is because quality as a concept has metamorphosed or changed over the years and it involves objective quality bordering on the characteristics and quality of goods and services that meet implicit and explicit customer demands (Alzoubi et al., 2019). TQM through this quality control approach aims to make qualified graduates who are qualified and able to be competitive. However, to be able to realize quality through the implementation of Total Quality Management in the management of an educational institution or school, it re-

quires commitment and good cooperation between all school members and cooperation with the community.

SMK Negeri 2 Banjarmasin and SMK Negeri 4 Banjarmasin are two of several vocational schools in South Kalimantan that commit to improving the quality of education by applying the standards of ISO 9001: 2015 and the guidance standard quality Working Culture School or Budaya Kerja Sekolah (BKS) which is compiled by the school by paying attention to complete facilities and infrastructure that support teaching and learning activities, certified teacher and professional staff. Vocational education has made several mandatory courses consisting of both practical and theoretical aspects (Fjellstrom, 2014). It is also perceived as improving the opportunities of youths who lack the resources, skills, or motivation to continue with higher education (Brunello & Rocco, 2017).

On the other hand, ISO 9001 has been revealed by several empirical studies as an important tool of quality management for improving continuously performance within the organizations to satisfy customer's needs and promote competitiveness in the market (Neyestani & Juanzon, 2017). ISO 9001: 2015 is the latest version of the ISO Quality Management System standard that has been updated from ISO 9001: 2008 (Sari et al., 2017). ISO 9001 is a Quality Management System (QMS) standard that is widely adopted by many companies (Sumaedi & Yarmen, 2015) that is in line with the implementation of Total Quality Management (TQM) (Nurcahyo et al., 2019). ISO 9001 is a good option to achieve consistent quality assurance (Simoes et al., 2016).

SMK Negeri 2 Banjarmasin has a Professional Certification Institute named LSP SMKN 2 Banjarmasin, which provides an opportunity for students to have a competency certificate from the National Professional Certification Agency (BNSP). Competence has a close relationship with standards (Norris, 1991). Students' achievements are expected in the framework of specific areas of competence (Ertl, 2006) which can be established for specific education levels and types

(Lillevali & Taks, 2017) such as vocational school. So that graduates of SMK Negeri 2 Banjarmasin have certificates that prove the competence they have to compete for jobs. Competence is a skill that may be conceived of as a disposition that enables a person to cope with particular situational demands (Glaesser, 2019).

The development of competence involves a change in the structure of the meaning for practices (Dall'alba & Sandberg, 1996). Graduates of SMK Negeri 2 Banjarmasin are absorbed in the working field, become entrepreneurs, and continue their education to higher education. In the working field, competencies help to describe human behavior associated with high job performance, which can be applied in strategic workforce planning, training, motivating, and performance management (McClelland, 1873); (Wesselink & Wals, 2011). Whereas, becoming an entrepreneur is the result of a major driving force to enhance the development of entrepreneurship competencies (Draycott & Rae, 2011). Entrepreneurship can be defined as the creation and management of new ventures allowing innovation in products, services, and markets, generate jobs and support competitiveness that considered one of the key drivers of the economy (Shane & Venkataraman, 2000). Meanwhile, preceding vocational training could also make access to university or higher education easier since it is a kind of insurance if university training, later on, cannot be completed successfully (Hillmert & Jacob, 2002).

Meanwhile, SMK Negeri 4 Banjarmasin is implementing ISO 9001: 2015 quality management and getting revitalization in the tourism sector. To support the quality of learning and graduates, SMK Negeri 4 Banjarmasin has complete facilities and infrastructure and certified teachers. With the support of the best facilities and professional teaching staff, SMK Negeri 4 Banjarmasin can produce graduates with character, able to compete in the industrial world. It is important because the industrial revolution 4.0 will change the way people work, how they consume, and even how they think (Min et al., 2019). SMK Negeri 4 Banjarmasin has a

Professional Certification Institute, LSP SMKN 4 Banjarmasin which provides an opportunity for students to have a competency certificate from the National Professional Certification Agency (BNSP). So that graduates of SMK Negeri 4 Banjarmasin have certificates that prove the competence they have to compete in obtaining jobs. SMK Negeri 4 Banjarmasin can create young entrepreneurs who are ready to compete globally. Facilitating scholarships abroad. Graduates of SMK Negeri 4 Banjarmasin are absorbed in the working field, become entrepreneurs, and continue their education to higher education.

In this study, researchers researched the implementation of Total Quality Management in school management to improve the quality of education at SMK Negeri 2 Banjarmasin and SMK Negeri 4 Banjarmasin.

Theoretical Review

Total quality management

Total Quality Management is a meaningful and quality standard in education that provides a philosophy of continuous improvement that can provide a set of practical tools to every educational institution in meeting the needs, wants, and expectations of its customers for the present and future (Sallis, 2015). Meanwhile, Total Quality Management is a combination of all functions of the company into a holistic philosophy built on the concepts of quality, teamwork, productivity, understanding, and customer satisfaction (Ishikawa, 2016). So, Total Quality Management is a meaning and quality standard in the development of the concept of quality assurance (quality assurance) which seeks to create a culture by encouraging all members of the organization to be able to satisfy students or external stakeholders today and in the future through the process. continuous improvement to achieve quality improvement to be able.

The implementation of Total Quality Management is by making continuous improvements to meet the expectations of stakeholders (Sani et al., 2015). Total Quality Management programs do not have to use the

name Total Quality Management. Some organizations embrace the philosophy of Total Quality Management by using a name of their choosing. Because the most important thing is not the name, but the influence of the quality program on the school culture. Students and parents will be interested in changes created by the school, not in the name (Sallis, 2015).

1. Requirements for Implementation of Total Quality Management

There are several requirements to implement Total Quality Management, namely: commitment from top management, commitment to required resources, organization-wide steering committee, planning and publication, infrastructure that supports the dissemination, and continuous improvement (Tjiptono & Diana, 2003).

2. Implementation phases of Total Quality Management

According to Seetharaman et al. (2015), the implementation phase of Total Quality Management is divided into three phases, namely: the preparation phase, the planning phase, and the implementation phase Factors that can cause the failure of Total Quality Management, namely due to half-hearted implementation efforts, unrealistic expectations, bad delegation and leadership from senior management, team mania, the process of disseminating quality initiative development without concurrently developing a plan, using a limited and dogmatic approach, excessive and unrealistic expectations, premature empowerment (Tjiptono & Diana, 2003).

PDCA methods

To improve the quality of education, it is necessary to implement a method known as the PDCA method (plan, do check, action). This method was first developed by Sheward and visualized by Deming, in the form of a PDCA cycle (Dudin et al., 2014). The PDCA stages popularized by Deming in quality assurance, namely: the first stage begins with making a plan, namely the activity of setting standards. The second stage is implementing the plan (do) following the standards that

have been set. The third stage evaluates (check) by comparing implementation with predetermined standards. And the fourth

stage is a follow-up (action) by making further improvements based on the results of the evaluation (Sani et al., 2015).

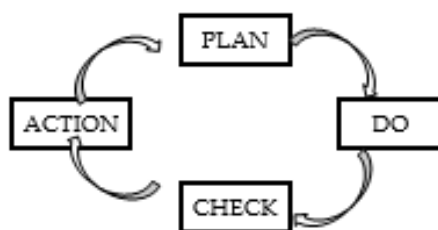


Figure 1. PDCA cycle of Edward Deming S.

Material and Methods

This research is descriptive qualitative with the type of research study of multi-site that begins with the findings of each case, comparing the findings across the case, then compile the findings, propositions, and theories as to the case of cross derentatif recent findings. The selection of research locations was based on the implementation of TQM at both sites. Researchers in this study are the main instruments that are directly involved in the research. The data collection techniques used were in the form of observation, interview, and documentation, and in-depth observation of the TQM components in the school understudy which are the principal, the vice-principal in the field of quality management, and the school development team.

Results and Discussion

The implementation model of total quality management in school management site I Strategy

The findings at SMK Negeri 2 Banjarmasin in the implementation of Total Quality Management (TQM) aim to improve the quality of service quality and improve the quality of alumni absorption in the working field which must involve all citizens or school components to satisfy stakeholders, students, parents, government, IDUKA and public.

The implementation of Total Quality Management (TQM) at SMK Negeri 2 Banjarmasin was preceded by developing strategies

such as: aligning commitments to all related components. Commitment is realized by forming Quality Development Team is authorized and evidenced by the Decree of the Principal. Then the Principal as a Top Management performs control to implement a management source power of a man who either in the form of calls, orders, evaluation, and discussion internally. preparation of the vision, mission, and goals of the school, the school quality service development team, and school programs as basic references so that the implementation of Total Quality Management in schools can run well. In addition, in the school quality service development team, good cooperation between members is required. Performance evaluation by the head of quality management and the principal plays an important role in the planning process for the implementation of Total Quality Management (TQM) in schools.

Implementation

Implementation is done by applying up to advance the standard of quality that will be used by schools as a step beginning of the implementation of Total Quality Management (TQM). SMK Negeri 2 Banjarmasin (Site I) using standard quality of Culture Work School or Budaya Kerja Sekolah (BKS) with some standard since the year 2015 with the previous wear ISO 9001: 2008 as the standardization of service quality. BKS used as guidelines and procedures in all activities in the school

that formed the culture of work and culture of the organization are good.

Implementation begins with doing School Self Evaluation or Evaluasi Diri Sekolah (EDS) were routinely performed and the results are used as the basis of making the vision, mission, objectives of the school as well as the School Plan or Rencana Kerja Sekolah (RKS), Intermediate School Plan or *Rencana Kerja Jangka Menengah* (RKJM), and the Annual School Plan or *Rencana Kerja Tahunan* (RKT) which is published to the public. After that, SMK 2 Banjarmasin does increase quality by working together with IDUKA and perform the alignment of curriculum that is based on industry and inclusive and make teaching factory that makes school that has a great service quality and become the Center of Excellence (CoE) school.

Obstacles

In the implementation of Total Quality Management (TQM) in school, SMK 2 Banjarmasin faces some obstacles that are caused by a lack of commitment to abide by the rules and procedures of BKS and not the laws that regulate concerning violations committed in school.

Evaluation

SMK Negeri 2 Banjarmasin was found to immediately evaluate if there were any obstacles or discrepancies in the implementation of Total Quality Management (TQM) in schools. Evaluation is carried out on programs that have not been implemented, are being implemented, and have been implemented. Stages of the evaluation carried out by the internal parties associated with referring to the SOPs applicable. The review, accost, discussion, and guidance from the Principal as the top management plays an important in the evaluation of the implementation of Total Quality Management in SMK 2 Banjarmasin.

Solutions

If obstacles are found to be able to give negative influence to the implementation of the program as a whole, it will be carried out the review, followed by a meeting internal and giving feedback, the formulation to change SOPs so that the implementation of the program can be re-done by smoothly.

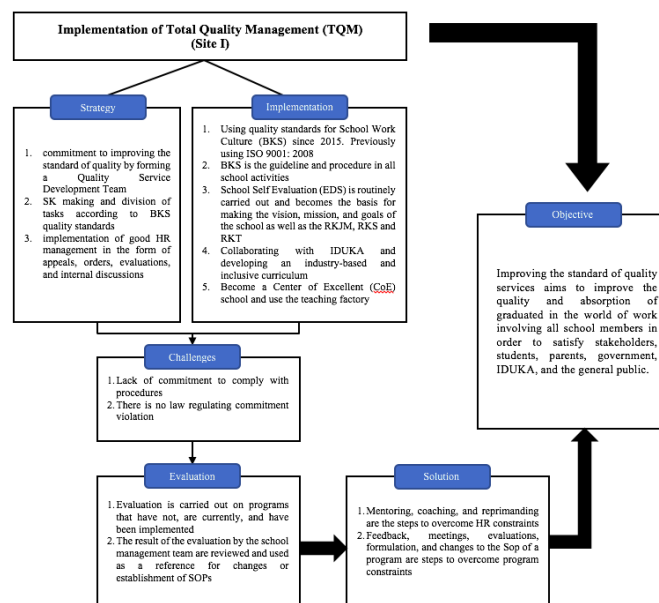


Figure 2. Total Quality Management (TQM) implementation model site I

The implementation model of total quality management in school management site II Strategy

The findings at SMK Negeri 4 Banjarmasin in the implementation of Total Quality Management (TQM) aim to improve the quality of service quality and improve the quality of alumni absorption in the working field which must involve all citizens or school components to satisfy stakeholders, students, parents, government, IDUKA and public.

The implementation of Total Quality Management (TQM) at SMK Negeri 4 Banjarmasin was preceded by making strategies such as: aligning commitments to all related components. Commitment is realized by forming Quality Development Team is authorized and evidenced by the Decree of the Principal. Then the Principal as a Top Management performs control to implement a management source power of a man who either in the form of calls, orders, evaluation, and discussion internally. preparation of the vision, mission, and goals of the school, the school quality service development team, and school programs as basic references so that the implementation of Total Quality Management in schools can run well. In addition, in the school quality service development team, good cooperation between members is required. Performance evaluation by the head of quality management and the principal plays an important role in the planning process for the implementation of Total Quality Management (TQM) in schools.

Implementation

Implementation is done by applying up to advance the standard of quality that will be used by schools as a step beginning of the implementation of Total Quality Management (TQM). SMK Negeri 4 Banjarmasin (Site II) before using the standard of quality ISO 9001: 2008 and upgraded into ISO 9001: 2015 to the service quality that given school can be a maximum, SMK Negeri 4 Banjarmasin make a manual quality book based on standards ISO 9001: 2015 to all the activities and programs of the school following the standards of quality that apply.

Implementation begins with conducting a School Self Evaluation or Evaluasi Diri Sekolah (EDS) were routinely performed and the results are used to formulate and make the vision, mission and goals of the school as a guide; School Plan or Rencana Kerja Sekolah (RKS), Intermediate School Plan or Rencana Kerja Jangka Menengah (RKJM), and published the Annual School Plan or Rencana Kerja Tahunan (RKT) to public. SMK Negeri 4 Banjarmasin increase quality by working together with IDUKA and perform the alignment of curriculum that is based on industry and inclusive, did revitalization in the field of tourism so that makes the school that has the great service quality of the good and become center of excellence school (CoE) in the hospitality field.

Obstacles

Total Quality Management (TQM) in school do not always go according to expectation, SMK 4 Banjarmasin also facing some obstacles that are caused by a lack of understanding of the SOP and manual quality, their miscommunication, the conflict between the lines, the conflict between the junior and senior at the school, and delayed making school activity report.

Evaluation

SMK Negeri 4 Banjarmasin evaluates the implementation of Total Quality Management (TQM) if the deviation is found in activities that are not following school standards or school quality manuals. Evaluation is carried out on programs that have not been implemented, are being implemented, and have been implemented.

Solution

Results of the study showed, if found obstacles in the implementation of Total Quality Management (TQM), will be carried out the review, analysis, estimates of risk, and taking action that is required. Giving guidance made by the Principal to ensure the program the school runs the appropriate standards are applicable. Giving appreciation was also done

to the employees so that their performance can be increased.

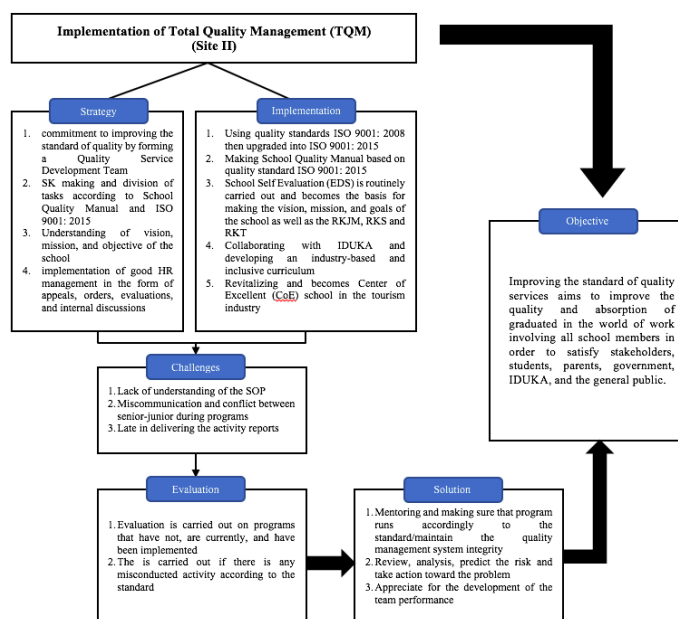


Figure 3. Total Quality Management (TQM) implementation model site II

Cross-site findings

TQM implementation strategy in school management

The findings show that SMK 2 and SMK Negeri Banjarmasin 4 Banjarmasin have in

common strategies in the implementation of TQM as a management school that is described in table 1.

Table 1. TQM implementation strategy in school management

Site I	Site II
Commitment Alignment	Alignment of Commitments and Understanding
Creation of Team	Creation of Team
Distribution of Duties and Responsibilities	Distribution of Duties and Responsibilities
Giving Orders, Reprimands, and Appeals	Providing Guidance, Training, Reminder, and Appreciation
Program Review and Evaluation	Evaluation

Implementation of TQM in School Management

The results of the findings showed that the standardization of quality that is used in the management of the quality of schools may be different, but aimed at the increased quality of service quality and absorption of alumni in the working field. Standardization of quality that is used in SMK 2 Banjarmasin

is Culture Work School (BKS) and at SMK Negeri 4 Banjarmasin wears ISO 9001: 2015. Both standardizations of quality is equally referred to as the 8 Standards of National Education of the Republic of Indonesia.

Both sites are found equally do School Self Evaluation or Evaluasi Diri Sekolah (EDS) regularly so that the results are used as

the basis of making the vision, mission, and objectives of the school as well as the School Plan or Rencana Kerja Sekolah (RKS), Intermediate School Plan or Rencana Kerja Jangka Menengah (RKJM), and the Annual School Plan or Rencana Kerja Tahunan (RKT) published to the school's internal and external environment. Besides that, both sites are found already established working together with IDUKA and perform the alignment of curriculum that is based on industry and inclusive, did revitalization so the school becomes a Center of Excellence (CoE) School in Banjarmasin.

Obstacles in the Implementation of TQM in School Management

Obstacles were discovered by researchers at both sites have similarities, namely in the implementation of TQM at Site I or Site II may occur miscommunication, the conflict between the lines, lack of commitment and understanding of the SOP or Manual Quality, and delays in the delivery of the report of activities of the school.

Evaluation of TQM Implementation in School Management

Evaluations are carried out if there is a deviation or discrepancy in the implementation of TQM in school begins with conduct internal evaluation, then proceed with the findings evaluation, budgeting evaluation, and social control evaluation through the work culture and organizational culture.

Solution of TQM Implementation in School Management

The site I and Site II provide the same solutions in general to the obstacles that faced during the implementation of the program, namely: 1) provide guidance and ensure the program runs according to SOP; 2) maintaining the integrity of the quality management system; 3) review, analyze, estimate risks and take action on problems that occur; 4) improve the assurance of quality internally, by way of giving appreciation to improve the performance of the team.

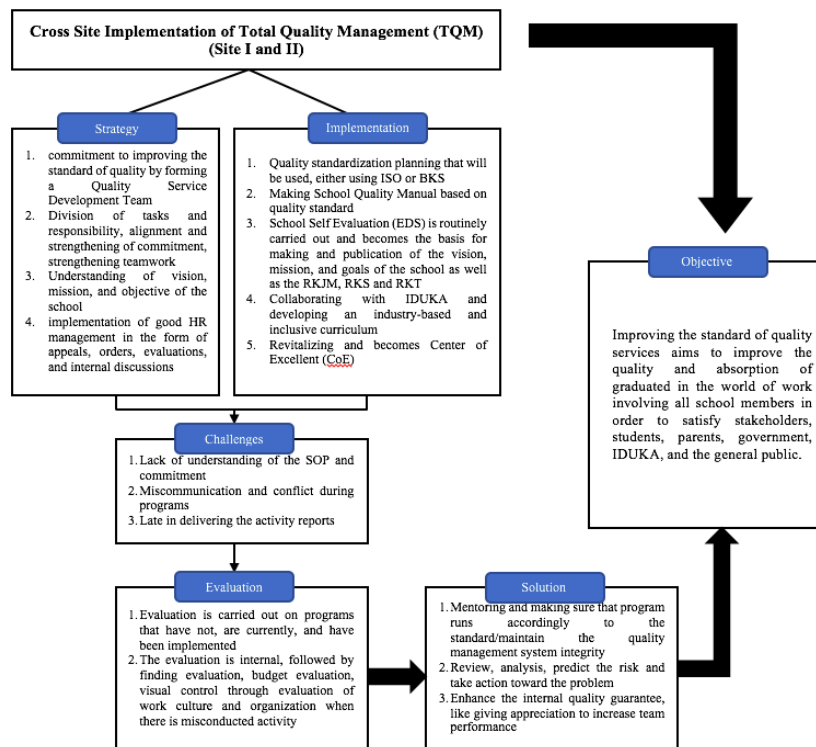


Figure 4. Cross-site Total Quality Management (TQM) implementation model

Conclusion and Recommendation

Based on the research results, the researcher can conclude that the implementation of Total Quality Management in school management using cross-site study at SMK Negeri 2 Banjarmasin and SMK Negeri 4 Banjarmasin:

1. Implementation of Total Quality Management in school management begins with a plan that contains measures or quality standards that will be used; implementation of School Self Evaluation or Evaluasi Diri Sekolah (EDS); formulating and making the vision, mission, and goals of the school as a guide; School Plan or Rencana Kerja Sekolah (RKS), Intermediate School Plan or Rencana Kerja Jangka Menengah (RKJM), and the Annual School Plan or Rencana Kerja Tahunan (RKT); and the curriculum development.
2. The strategy used to implement Total Quality Management (TQM) in school management begins with the creation of a Quality Development Team; division of duties and responsibilities among team members; alignment and strengthening of commitment; and how to create and maintain collaboration between team members.
3. The evaluation carried out in the process of implementing Total Quality Management (TQM) in school management begins with an internal evaluation from each team member / interested party; followed by evaluation of findings or non-conformities with existing standards; budget evaluation; and social control through evaluation of work culture and organization.
4. The obstacles that occur during the process of implementing Total Quality Management (TQM) in school management can be manifold. The solution is to improve internal quality assurance in schools.

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