



CONTEXTUALIZATION OF DEMING AND CROSBY'S THEORIES IN IMPROVING EDUCATIONAL INSTITUTIONS

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Abstract:

This research is a figure thinking study focused on two quality thinkers, Deming and Crosby. Using the Library Research research method presented in the form of argumentative approaches and descriptive analysis. The 14 quality points expressed by Deming and Crosby are interesting for further investigation, Deming emphasizes the scope of the concept and the theory of quality management, while Crosby focuses on the construction of the components of the quality management as well as the details of its implementation. In this article, the author offers the theoretical concepts and contextualization of quality management Deming and Crosby in improving the quality of education with the concept of "Circle of Three Layers". In this concept there is a continuous blend between theory and context. The working step of this concept is to emphasize the development of theory (theoretical improvement) and the contextualization of the theory in the educational institutions, so that after the process of the contextualization theory is carried out, then it is expected that the institutions of education can improve the quality (quality improving) and competitive quality (competitive quality). (periodic evaluation).

Keywords: *Contextualization Theory, Quality Management, Deming-Crosby*

INTRODUCTION

Two influential figures in quality management are Edward Deming and Phillips Crosby who both have the concept of 14 points of achieving quality. When discussing the ideas of Deming and Crosby, it is worth noting that both approaches have limitations and shortcomings, especially as developed in an industrial context. Nevertheless, both proved in theory and fact findings in the field many provide enlightenment and clear guidance. There are many things that can be learned from them and, of course, can be applied in education. As you will know, there are many complementary things between them, both in their thinking, and in their general conclusion, so that quality management can develop in the world of education. (Siahaan dan Sari, t.t.).

According to Zainal Fanani quoted by Wardatus Sholehati, mentioned that in order to realize better quality of education it is necessary to always carry out evaluation of programmes for continuous improvement of quality. (Faizin dan Sholehati 2019). To improve it can implement the functions and measures that have been established management in general i.e. with the presence of planning, implementation, evaluation and control. One of the strategies that many educational institutions in Indonesia are currently implementing is by adopting an international standard quality management system to be applied to their educational institution. One international quality standard

for quality management systems is ISO 9001:2008, which is a customer-satisfaction-oriented system of quality management, so that the system can be used in an educational organization or unit. (Fanani 2022).

Quality is a value to be taken into account in any educational maintenance process. The various matters relating to educational activities organized by educational institutions must have quality assurance as their primary standard. (Marzal 2023). The standard measure of quality of education can be identified from the output of education of the graduates. Competitiveness, competence, and also the good response of the community to the graduates of education are signs that the educational process is going well and quality.

A true educational institution aims to meet and serve the needs and expectations of society in creating and increasing customer satisfaction. In the concept of quality management the main focus is customer satisfaction which will of course be determined by the stakeholders of the educational unit. The objective of all should be directed to the primary goal of the satisfaction of the user of the educational service, and to carry out continuous evaluation or improvement. Components of quality management implementation in education include leadership, a customer-focused approach, process approach, climate, organizational culture, problem solver, data utilization, scientific methods and tools as well as education and training .

In addition to improving the quality of education, what is not less important is to formulate a corporate strategy aimed at increasing the competitiveness of the institution. Some of the steps that can be taken in this strategy are to re-actualize a clearer vision and mission, set strategic goals, design institutional priority programmes, conduct environmental analysis, formulate action plans and carry out evaluations up to monitoring. (Purnama dan Warosari 2023). This strategy aims to build public confidence in educational institutions, when the sales value is met with the national educational standards, then the competitiveness of the institutions will also increase. Of course the improvement still takes a process of time not short, it takes at least five years to measure the implementation of educational programmes.

Often we find that some educational institutions focus on competition not on quality competition but rather on pricing competition. So this kind of practice is considered mismanagement of quality education, price competition is focused only on the value of the quantity of students in one institution, while quality values are much more important to be fought for in the leadership of a quality education system.

Another problem the author finds is, when theoretical understanding is not balanced with contextualization. The theory is not a mere fantasy, but rather a generalization of so many cases of an empirical nature. While contextualization is the practice of the theory (text) against a particular context, so the author considers it very important for the researcher to blend between the theoretical understanding and contextualisation, in order to awaken a conceptual step of work built on the understanding of text and context.

To answer this problem, in this article the author offers the concept of a "three-string circle" that continuously blends theory and context. The working step of the concept proposed by the author is by emphasising the development of theory improvement and contextualization of the theory of the educational institutions, so that after the process of contextualisation theory is carried out, then it is expected that the education institutions can improve the quality and competitiveness. (competitive quality). These concepts, theories and steps of work will get maximum results when continuous improvement and periodic improvement are carried out. (periodic evaluation).

RESEARCH METHODS

The method that the author uses in this research is using qualitative methods. (library research). With a concrete step of reading and thoroughly examining several books, scientific journals that discuss the thinking of the two characters as primary data in the writing of this article. From several references the author read, then carried out

analysis and associated with the educational context of today with the aim of producing research that blends understanding theory and contextualization.

RESULTS AND DISCUSSION

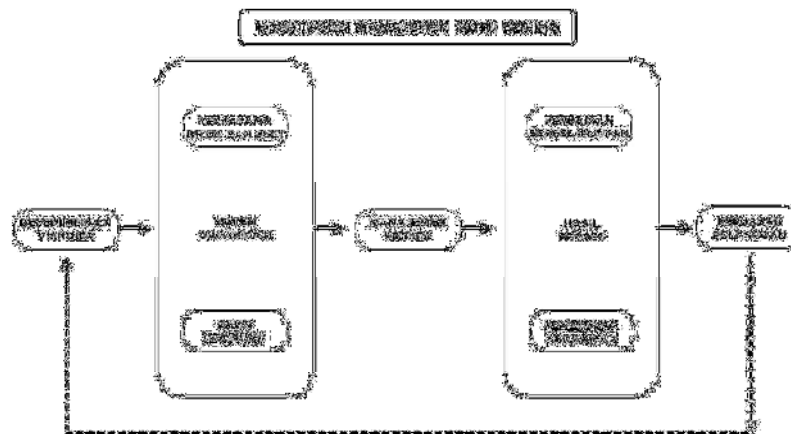
Deming Management Construction in the Education Quality Review

Deming's quality management methods contain a series of 14 points that serve as guidelines for proper organizational behavior and practices for quality improvement. The more organizations realize the importance of quality and quality management, the more institutions will conclude that effective quality management can enhance competitiveness and provide strategic advantages in society. (Anderson, Rungtusanatham, dan Schroeder 1994). This Deming theory has made many contributions to organizations, both large and small, manufacturing and services, profit and non-profit, to form and develop their organizations with quality management.

W. Edwards Deming, was a member of a few selected people who were believed to have contributed to the revitalization of the Japanese economy after World War II. (Deming 1986). Anderson, in his research, said that the widespread popularity of quality management appears to stem from numerous case studies linking the change in the direction of the organization/agency with the influence of Deming's theory. (Anderson, Rungtusanatham, dan Schroeder 1994). The goal of quality management Deming continues to be the transformation and improvement of management practices, in particular quality management practice. This theoretical formulation can move us to function to boost the efficiency of quality management and the competitiveness of education.

According to Deming, quality management is problem solving to continuous improvement, while according to K. Ishikawa quality is a series of processes that emphasize customer satisfaction. (Bintari 2022). The organizers of the organization/agency must be able to meet the expectations of the community in relation to the sales value that they have on the outside of the educational process, so that the orientation of educational objectives of quality should be the basis in the planning of the education process at the unit of the institution.

As presented by Anderson, Deming's construction of quality management is based on seven general frameworks whose description and measures are found in the Deming theory. First: Visionary leadership, the ability of leaders in establishing, practicing and leading the long-term vision of an organization; second: Internal and External cooperation, the tendency of organizations to compete (competition) internally and externally; third: the scientific basis, the organization's ability to nurture and recognize the development of skills, capabilities and knowledge bases; fourth: Process management, a set of methodological practices and behaviors that emphasize process management, or means of action rather than results; fifth: Continuous improvement, the organisation's tendency to make gradual and innovative improvements to its processes, products and services; sixth, the fulfilment of employees, organizations become a source of good service to employees, when their obligations are fulfilled, then also rights should be observed; The organization's tendency for progressive and innovative improvement of its products, services; sixth, the employee's fulfillment as a product and the organization feels that their needs are continuously satisfied by customers. (Anderson, Rungtusanatham, dan Schroeder 1994).



In general, quality management is determined by three basic things, namely: 1) the primary focus on the customer as the determinant of the quality of the product or service so that the maximum possible product or services are produced to meet the needs and expectations of the customer will be better if the product output exceeds customer expectations, 2) establish good relationships with several stakeholders so that each implementation process can go well, 3) continuous improvement based on the facts resulting from the monitoring and supervision carried out by the leader of the organization / agency.

Crosby Management Construction in the Education Quality Review

Philip B. Crosby is one of the quality experts among the few experts who have two interesting and powerful ideas about quality. The idea is that quality is free of charge and the second is failure, mistake and waste and delay of time, and all unqualified and quality things can be eliminated when there is the will of the institution. Both of those ideas would be very interesting when implemented in the world of education. (Wijaya 2020).

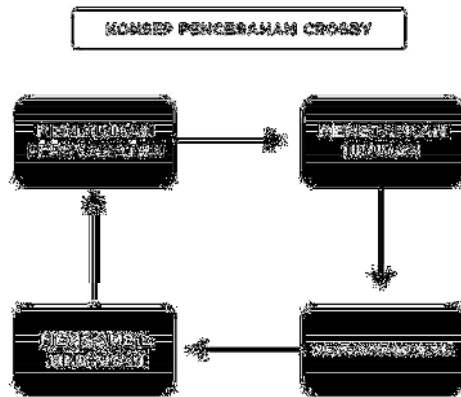
Crosby provides a definition of quality with the conformity of the product/service to the customer's recognized requirements, both in terms of input, process and output. (Wijaya 2020). Therefore, the quality of education organized by educational institutions is demanded to have a national standard of quality education (Asmuni 2013).

Philip B. Crosby's concept of quality is known for managing zero defects and preventing them, not agreeing on a statistically acceptable level of quality. (acceptable quality level). He is also known for his quality vaccine and Crosby's fourteen step to quality improvement. (Wijaya 2020). A product has quality when it meets the standard of quality that has already been established. Quality standards cover raw materials, production processes and finished production (Rif'an 2018).

In organizations, Crosby stressed that quality improvements can occur when company management focuses more on prevention through employee attention and awareness, cost reduction, emphasis on control rather than inspection efforts. (Neyestani 2017). Later, Crosby put forward four conclusions based on the philosophy of Total Quality Management (TQM), first, quality is defined as "compliance with requirements", (not goodness or elegance); second, quality comes from a system based on prevention, (not judgement), prevention can be caused by good quality management; third, the quality performance standard is "zero defects"; fourth, quality measurement is the price of inadequacy (not an index). (Neyestani 2017).

Crosby's approach focuses more on prevention than on checking and correcting errors. He said that prevention skipped the process of thinking, planning and analysis to anticipate where mistakes could happen. For Crosby, the problem is usually created

because the product or service requirements are inadequate or inappropriate. The process of prevention begins with identifying the needs of the product or service, developing the products or services, collecting and comparing the data with the needs, then taking action on the results, the process is a continuous activity. (Suarez 1992).



According to Wijaya's explanation, the only solution to the problem of quality management is through leadership management. Crosby outlined the Quality vaccine, namely: firstly, the purpose: for this management includes the only tool that will change the image of an agency or organization, secondly, education: help the whole element of an organization to develop a universal understanding of quality and aim to be understood by each element in a quality improvement process, thirdly, application: guidance and guidance related to the improvement program. (Wijaya 2020).

Contextualization of Deming Theory in Education

Although Deming's theory is a quality management theory in a profitable field, it can be applied in a non-profit field such as education. Contextualizing Deming's theory can help an institution to successfully carry out sustainable forward improvement and service of quality. Here is the contextualization of Deming's theory in the world of education:

To set new goals and innovations for achieving the quality of educational institutions as an educational system necessary to set goals to be achieved. A clear vision and mission will give a clear direction to the educational institutions. Thus, every decision and action taken by the library management is based on the vision and mission that is to be achieved, and the staff of the institute work with guidance on the mission and vision

Adoption of the Philosophy and New Methods The educational institutions are continuously developing and innovating with the emergence of new methods. Here are some examples of new approaches in education that have emerged or evolved, such as project-based learning, inquiry based learning, game-based Learning, online learning, collaborative learning and flipped classroom.

Stop relying on mass surveillance and infection A method of measuring and controlling the quality of an educational institution, including conducting customer surveys (students, student guardians and the general public), evaluation of institutional programmes aimed at performing periodic and sustainable improvements. To be more effective, in measuring quality achievement in educational institutions can be by using sampling methods.

According to Chen and Paulraj as quoted by Anindya said that a good relationship between the company and its suppliers will provide benefits for both sides especially in increasing productivity, innovation and competence. (Gita P 2017).

Contextualization of these points can be done, for example in improving the quality of employees and staff of educational institutions can conduct recruitment process, in this process is expected filtering employees and personnel is actually done objectively, does not advance proximity or commercialization of the department.

Constantly Improve Productivity and Services Contextualizing the fifth point in Deming's philosophy in educational institutions is by applying the PDCA method (plan-do-check-action), which consists of curriculum planning measures, learning implementation, learning evaluation and improvement of learning processes. It can also help teachers and staff to systematically manage and improve the educational process.

The leadership of an educational institution is the key to the success of the institution in achieving its vision and mission. The training provided to staff and institutions is aimed at improving the effectiveness of the work of staff and staff in achieving the work objectives that have been mutually agreed upon. Usually the implementation of this employee training is done after the recruitment process, so in the training process has awakened also the familiarity between employees, it is also very helpful in increasing the motivation of work. Here are some examples of work training that can be implemented in education, such as workshops effective teaching, management training of SDM educational institutions and psychology workshops of pupils.

Forming the Soul of Leadership The quality of understanding and performance of a leader greatly influences the quality of education and achievement of goals. Sometimes there is a fear that a leader feels when his subordinate has more ability, but a leader who thinks creatively and is forward-oriented will encourage and motivate his staff to continue to improve their skills and continue their higher education. The head of the agency must be the primary driving force in achieving its vision and mission. However, a leader also needs the full support of its respective staff, so that a leader with good performance is born of a good follower "great leaders start off as great followers".

The meaning of this point is to build harmony and two-way communication between the leader and the subordinate. Effective communication needs to be done so that information related to core tasks and functions can be well understood by employees, so that managers can perform their functions well. To eliminate the fear of communicating in an educational institution can be done by holding a daily or weekly sharing session, where all the elements in the institution are free to speak and communicate complaints or share experiences.

Elimination of inter-departmental barriers The ordinary inter-party barriers occur when there are misunderstandings in communication and there is competition even competition between members of the department. Contextualization can be done in education by doing inter-departmental coordination meetings, joint weekly sports, and gathering activities. It's done so that the good relationships between the parts can get along well .

Remove the Slogan and Target of the Tenth Principle. This is practical, but more philosophical. Meaning of "removing slogans and targets" is more about how the SDMs properly understand the vision of the mission and the system of service, not just words. A proper understanding of the mission vision will make all the SDMs on the agency one. The contextualization that can be done in the library is by involving all SDMs in educational institutions in designing the mission vision, strategic plan, and Operational Standard Procedures (SOP) of education.

Remove Quotas or Quantitative Targets The meaning of this point is that the management of the organization should not focus on target numbers alone, because it will only reduce the quality and productivity of work. Officers will only focus on achieving targets quantitatively. So its contextualization in education requires a leadership role in directing all SDMs to focus on quality. Although the written education work plan has a number of targets, quality remains a priority.

Eliminate the obstacles that hinder the pride of an employee's skills. All employees will need space to update their skills. This self-actualization need is given by

the agency aimed at giving the staff a chance to grow. So the obstacles that hinder it must be removed. Contextualization can be done in educational institutions for example by involving staff in curriculum development activities and programmes of institutions, socialization activities of institutional development and partnership with the community, as well as providing space to use their creativity and expertise in completing some assigned tasks.

Give a program of enhancement of spirit and quality of work. Everyone should be aware that as a professional you must always improve your abilities. Educational programmes can be given to educational institutions, for example, by encouraging them to continue their studies and obtain higher education than before.

Engage Everyone in Education Transformation Employee involvement is very important in the application of Deming's philosophy. Giving employees the opportunity to participate in the planning, control, and implementation of quality management processes in educational institutions can trigger employees active and enthusiastic in realizing the vision of education. Employees are also more responsible for their work and are actively involved in improving the quality of education.

Contextualization of Crosby Theory in Education

As the author said at the beginning, that Crosby put forward four concepts based on the philosophy of Total Quality Management (TQM), that is, the quality system is prevention, the standard of appearance is flawless, the measure of quality is the price of nothing, zero defect day. Here's its contextualization in the educational institutions.

Contextualizing the principles of prevention in a quality education system can reduce the risk of problems, ensure better quality of learning, and create an environment conducive to student growth and development. Effective prevention can help create a responsive, adaptive, and sustainable education system. In the Mutu system, prevention is better than cure. It means that preventing a problem is much better than fixing a problem after it happens.

In the context of educational institutions, the Prevention Principles can be applied to prevent the occurrence of problems in the teaching learning process. Here are some examples related to contextualization in educational institutions: 1. Identify potential risks and challenges that may arise in the educational process. 2. Analyze aspects such as curricula, teaching methods, evaluation, and classroom management to identify areas that require preventive attention. 3. Involve the entire educational community, including teachers, students, parents, and support staff, in the planning and evaluation process. 4. Encourage professional and skills development of teachers and staff by providing sustainable training and development as part of the preventive strategy.

The contextualization of the standard of defect-free appearance in education emphasizes efforts to and maintain the quality of education and employee performance without the presence of significant defects or shortcomings. It involves the implementation of a high standard of appearance and a rigorous evaluation process to ensure that all aspects of education go according to the set expectations. Here are some examples associated with the contextualization of standard appearances without defects in education: 1. Create clear and measurable standards of appearance for various aspects of education, including curriculum, teaching, evaluation, and school management. 2. Ensure that students, teachers and employees have sufficient skills, expertise and knowledge to help students the established standards. 3. Provide the necessary resources to support the professional development and skills of students and employees.

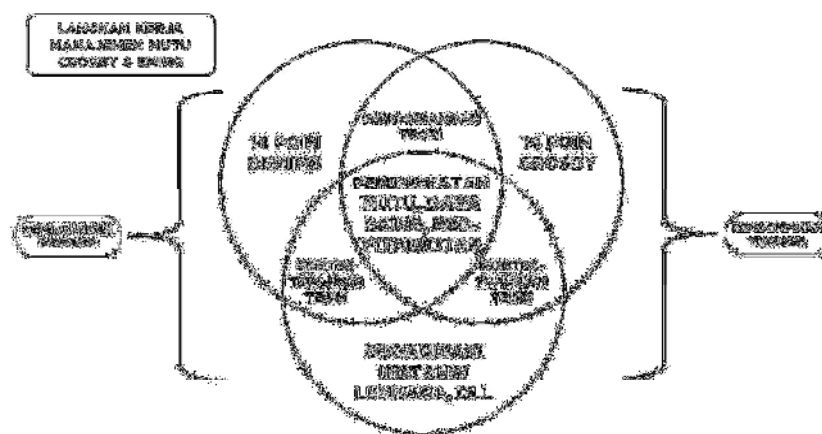
The context of a quality measure as an inadequate price in education refers to the understanding that any non-conformity or non-compliance with a quality standard has measurable consequences, both financially and non-financially. In this context, the "non-compatibility price" refers the cost or loss arising as a result of not meeting a set quality standard. The following are some aspects related to the contextualization of

quality measurements as the price of inadequacies in education: 1. Identify the direct and indirect costs associated with non-compliance with quality standards 2. Understand the negative impact on the image of schools or educational institutions and the potential reduction in attractiveness for prospective students and parents 3. Implement an open and fair system of assessment and feedback, which takes into account various aspects of students' abilities 4. Strengthen the monitoring and evaluation of education institutions to ensure that quality standards are continuously improved

Zero Defect Day (Day Without Disabilities) The context of zero defect in educational establishments is as follows: 1. Ensure the quality of Teaching Learning Activities (KBM) is carried out well and in accordance with the established standards without any obstacles 2. Increase student confidence and satisfaction with the educational institution 3. Ensure that learning facilities and devices are in good condition and are well-maintained 4. Create commitment and awareness about the importance of skill development and staff capacity development.

By contextualizing Zero Defect Day in educational institutions, it aims to create a day in which all educational elements run according to the highest quality standards. Of course, it requires the collaboration and commitment of all stakeholders, as well as a culture of sustained prevention and improvement throughout the element of educational institutions. From the exposure of contextualization above, both theories are thought that they build on the foundations of cases of an empirical nature.

From the contextualization exposure above, both theories are thought that they built on the basis of empirical case findings. The perfection of this theory is not the addition of points to some of the theories of quality that they establish, but rather its perfection is by contextualizing the organization or educational institution. Here are the authors' steps to contextualize Deming and Crosby's theory in applying quality to educational institutions.



The concept of a "three-string circle" that continuously blends theory and contextualization. The work of the concept proposed by the author emphasizes the development of theory (theoretical improvement) and the contextualization of the theory against educational organizations. In the implementation, the author puts visionary leadership as the main driver of this step of work. So it's very important for leaders to have a visionary understanding of their organizations, and a psychological understanding, to form institutions into large teams that are subsequently divided into sub-teams where everyone works on different aspects, but remains on the same goal, and build value to the workers, that when it comes to profit and success, it is not the individual factor, but the cooperation factor.

The development of the theory (theoretical improvement) that the author meant

was a process of understanding deeply related to the theories of Deming and Crosby. The pillar of understanding this theory again lies in the self of a leader, which is then passed on to its respective members. So, the next step is to contextualize the theory against the educational organization. This contextualization is based on an understanding of the context, which is of a simple and quiet nature. At this stage, the theory developed can be applied to some kind of concrete joint steps to improve the organization/institution of education. Once the theory is contextualized, then educational institutions can improve quality improvement and competitive quality and profitability. The concepts, theories and steps of work that the author offers will get maximum results when continuous improvement and periodic improvement are carried out. (periodic evaluation).

CONCLUSION

Quality management, Deming and Crosby, is not a complicated method to understand, of these 14 points we can summarize into five efficient steps in achieving organizational quality, first, continuous improvement; second, empowerment of employees; third, performance comparison; fourth, provision of needs on time; fifth, knowledge of the science and equipment related to the device product/service .

Deming's quality management effectiveness emerges from visioner leadership efforts towards the creation of cooperative organizations and simultaneous learning to facilitate the practical application of process management, which when applied supports customer satisfaction and recognized customer requirements. Survival of education through continuous improvement, continuous employee fulfillment, processes of conceptual understanding, theoretical contextualization, and improved product/service competitiveness.

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