

The Educational Quality Development Model of Kaoru Isikawa's Perspective

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Abstract: *This study aims to describe how the concept of developing quality education from Kaoru Ishikawa's perspective. This research uses a qualitative descriptive approach in the form of library research. The analysis technique used is content analysis. The results of this study show: 1) Quality Control can be done with the concept of quality circle, namely plan-do-check-action (PDCA) as a quality control tool that can ensure the quality of educational institutions. 2) The quality control circle concept is a design that cuts across all areas of quality improvement including the integration of quality assurance in new product development. In this way, the quality control circle potentially represents the majority of dialogue points for implementing Total Quality Control (TQC) or Company-Wide Quality Control (CWQC) in educational institutions. 3) The concept of Cause and Effect Diagram is a diagram that serves to solve problems effectively by putting the problem into a matrix of causal relationships to solve problems in educational institutions comprehensively.*

Keywords: *Development Model, Education Quality, Kaoru Ishikawa*

Introduction

The quality of education in Indonesia is currently very concerning. This is because there are several problems in the education system in Indonesia that have caused the decline in the quality of education in Indonesia. These include weaknesses in the field of education administration, gaps in educational facilities and infrastructure between urban and rural areas, weak government support, outdated mindset of the community, low quality of educational resources, and weak learning assessment standards.¹ These factors contribute greatly to the poor quality of education in Indonesia.

The results of the PISA survey on the quality of secondary education systems in the world revealed that Indonesia was in the 74th position out of 79 countries in the 2028 survey. This is a very concerning situation regarding the quality of education in Indonesia. Therefore, solutions are needed that can

¹ Fitria Nur Auliah Kurniawati, 'Meninjau Permasalahan Rendahnya Kualitas Pendidikan Di Indonesia Dan Solusi', *Academy of Education Journal*, 13.1 (2022), pp. 1-13, doi:10.47200/aoej.v13i1.765.

improve the quality of education in Indonesia.² Koslowski explained that a major concern in this era of intense competition is the demand for quality education that meets the needs of society. Today's society is more selective and demands more of the quality of education.³

Answering the above challenges, a solution is needed to solve the low quality of education. Kaoru Ishikawa's quality development concept can be one of the solutions to the phenomenon of low-quality education in Indonesia. Improving the quality of education is an obligation that must be fulfilled for all educational institutions in Indonesia. This is not just about meeting legal expectations but also ensuring the country's position in competition with other countries in the future. One of the determining factors is ensuring a better quality of education.⁴

Kaoru Ishikawa promotes quality development by developing quality control systems in companies or institutions. Ishikawa believed that if every country played its role in promoting quality control, world harmonization would be established and people could live in good, harmony and happiness. Organizations or institutions that do not practice quality control are unlikely to be able to maintain their existence or survive in the future.⁵ Ishikawa's statement contains the message that when managing an organization, including educational institutions, it must implement quality control procedures.

Improving the quality of education must be done as a whole, not just focused on one aspect. It must include all things related to the education process, from inputs, processes, and results. One of the factors for such improvement is good management. With effective management, educational institutions can achieve quality performance and results. Continuous quality improvement, both in quality and quantity, has now become a necessity for all education service providers, so that education, which is actually a means of building the character and ethics of the nation's next generation, can be carried out optimally.⁶

Research conducted by Mochammad Safrotulloh and Septi Gumiandri entitled *The Application of the Concept of Kaoru Ishikawa's Thinking*

² La Hewi and Muh Shaleh, 'Refleksi Hasil PISA (The Programme For International Student Assesment): Upaya Perbaikan Bertumpu Pada Pendidikan Anak Usia Dini', *Jurnal Golden Age*, 4.01 (2020), pp. 30-41, doi:10.29408/jga.v4i01.2018.

³ Abu Saleh Md. Sohel-Uz-Zaman and Umana Anjalin, 'Implementing Total Quality Management in Education: Compatibility and Challenges', *Open Journal of Social Sciences*, 04.11 (2016), pp. 207-17, doi:10.4236/jss.2016.411017.

⁴ Ali Rif'an, 'Quality Dalam Prespektif Pendidikan Islam', *Journal PIWULANG*, 1.1 (2018), p. 19, doi:10.32478/ngulang.v1i1.157.

⁵ Marc Balbirnie and others, 'Professor Kaoru Ishikawa: A Man in Search If Harmony', 2014, pp. 1-5.

⁶ Gusti Gusti and Masduki Masduki, 'Regulasi Penjaminan Mutu Pendidikan Di Indonesia', *Jurnal Intelektualita: Keislaman, Sosial Dan Sains*, 11.1 (2022), pp. 35-40, doi:10.19109/intelektualita.v11i1.10724.

Through Fishbone Diagrams in Improving Student Quality (Case study at DTA Al-Hidayah Dukupuntang). The focus of this research is to describe how the head of the Madrasah Diniyah Takmiliah Awaliyah MDTA works to solve students' moral problems and identify students' moral problems using the fishbone diagram.⁷ Furthermore, research was conducted by Tasya Annisa entitled Kaoru Ishikawa's Quality Control System in Developing the Quality of Education in Modern Islamic boarding schools. The focus of this research is to identify the effectiveness of the application of the fishbone diagram system and Ishikawa's quality control in modern Islamic boarding schools.⁸ The research was also conducted by Erika Mei Budiarti and Bahtiar Agung Pambudi with the title Development of Ishikawa Diagram as an effort to improve school quality. The focus of this research is to identify the implementation of the Ishikawa Diagram in improving school quality.

Based on the explanation above, this research aims to examine how the concept of developing the quality of Islamic education from the perspective of Kaoru Ishikawa comprehensively, which includes the concept of quality circle with plan-do-check-action (PDCA) steps, quality control circle, and the concept of cause and effect diagram. With this study, it is expected to obtain a comprehensive understanding of the concept of quality development in order to improve the quality of education in Indonesia.

Method

This research uses a descriptive qualitative approach with the type of literature review. Data were collected by documenting various literatures related to the concept of quality from Kaoru Ishikawa's perspective and the application of Ishikawa's quality concept in the development of educational quality. Data analysis using content analysis aims to produce the latest studies and detail the education quality development model systematically and completely.

Result and Discussion

Quality Concept from Kaoru Ishikawa's Perspective

Ishikawa is the locomotive that drives quality in Japan. There are several programs in Japan initiated by Ishikawa, some of Ishikawa's concepts were inspired and developed from the concepts of W. Edwards Deming and Joseph M. Juran into the concept of improving the quality of Japanese taste. In general, Ishikawa's quality concept is customer-focused Goetsch and

⁷ Mochammad Safrotulloh and Septi Gumiandri, 'Management Aplikasi Konsep Pemikiran Kaoru Ishikawa Melalui Diagram Fishbone Dalam Meningkatkan Mutu Siswa (Studi Kasus Di DTA Al-Hidayah Dukupuntang)', *Journal of Education Management*, 2.2 (2020), pp. 113–26.

⁸ Tasya Annisa, 'Sistem Quality Control Kaoru Ishikawa Dalam Mengembangkan Mutu Pendidikan Di Pondok Pesantren Modern', *Edukatif: Jurnal Ilmu Pendidikan*, 5.4 (2023), pp. 1739–46, doi:10.31004/edukatif.v5i4.5318.

Davis⁹ explains the two main pillars of quality according to Ishikawa: a) customer satisfaction and quality are the same things, and b) the definition of quality is very broad, not only about products, but also the quality of people, processes, and all aspects of the organization.

The quality theory introduced by Ishikawa includes six quality principles. These six principles became the foundation for the establishment of the quality model in Japan. The six quality principles are:¹⁰ 1) The business objectives and reasons behind the implementation and promotion of quality control in the company should be clearly understood by all employees; 2) The various aspects of the quality system should be made clear at all levels of the organization and well communicated so that people have confidence in these characteristics; 3) Continuous improvement cycles should be carried out in all parts of the company for at least three to five years in order to establish good work standards. Quality control statistics and process analysis should be used, and effective supplier controls should be developed and implemented; 4) The organization must have a future quality plan and implement it systematically; 5) the separation between work divisions must be eliminated and it is necessary to have cross-divisional managerial; 6) all employees must be optimistic and confident that the work done in the future will produce results. Ishikawa combines these principles and ideas into a holistic system of thinking about working to improve performance.

Concept of Education Quality

High-quality education is education that produces achievements, provides the best service, and produces graduates based on market expectations and needs (Users). Quality in the context of education is closely related to excellent service, which has an impact on the satisfaction of users of educational services. In the education system, quality is related to student input, the process of providing student services, and the results. Therefore, the quality of education can be implemented more creatively and constructively by prioritizing student and school improvement programs.¹¹

According to Omar Hammalik, quality can be seen from two points of view, namely normative aspects and descriptive aspects. Usually, quality is determined by internal and external factors. Based on internal standards, the quality of education is the result of the educational process, namely people who have been educated according to ideal standards. According to external criteria, quality education is used to prepare a good workforce. Quality based

⁹ David L. Goetsch Stanley Davis, *Quality Management For Organizational Excellence: Introduction to Total Quality* NJ: Printice Hall International, Inc., Pearson Education Limited, 2016. 439.

¹⁰ Greg Watson, 'The Legacy Of Ishikawa', *Quality Progress*, 37.4 (2004), pp. 54–57.

¹¹ Syafaruddin, *Manajemen Mutu Terpadu Dalam Pendidikan: Konsep, Strategi Dan Aplikasi*, (Jakarta: Grasindo, 2002), 35.

on the descriptive meaning views the academic test results that determine the quality.¹² It can be concluded that the quality of education is not a simple thing, but a complex and dynamic thing. Knowledge always develops over time. Therefore, the quality of education must be improved and continuously improved to meet the increasing needs and demands of human life.

Furthermore, Hoy, Jardine, and Wood, explain the quality of education is a comprehensive assessment of the educational process that emphasizes the need to understand and develop the talents of clients (students) according to accountability standards that become the standard of students or learners. People who fund educational programs or the results of educational activities.¹³ Furthermore, Beeby said that quality in the context of education can be seen through three perspectives, namely the economic point of view, the social point of view, and the educational point of view. From an economic point of view, if education can contribute to economic growth, then that is quality education. Economic growth can be done by graduates entering the workforce as soon as possible. From a social point of view, the quality of education refers to whether education is beneficial to society; from the point of view of education itself, the quality of education is related to the teaching process and building students' ability to think critically and solve problems.¹⁴

The quality of education is a balance between the needs of internal groups (students, teachers, principals, and other education personnel) and external groups (students, guardians, government, general public, industry, and the business world) as well as stakeholders involved in the services provided.¹⁵ Quality education is about how to manage education well, effectively, and efficiently. The aim is to create a suitable learning environment so that students can develop themselves well and graduate as competent individuals under national education standards.

Kaoru Ishikawa's Quality Control System

One of Kaoru Ishikawa's major achievements was the popularization and development of the quality control system. "I believe that global peace and prosperity require quality control," Ishikawa said. This is why quality

¹² Dosen Stai, Nurul Arafah, and Panton Labu-aceh Utara, 'Meningkatkan Mutu Pendidikan Islam', pp. 594-604.

¹³ Roni Harsoyo, 'Model Pengembangan Mutu Pendidikan (Tinjauan Konsep Mutu Kaoru Ishikawa)', *Southeast Asian Journal of Islamic Education Management*, 2.1 (2021), pp. 95-112, doi:10.21154/sajiem.v2i1.44.

¹⁴ Mardan Umar and Feiby Ismail, 'Peningkatan Mutu Lembaga Pendidikan Islam (Tinjauan Konsep Mutu Edward Deming Dan Joseph Juran)', *Jurnal Ilmiah Iqra'*, 11.2 (2018), doi:10.30984/jii.v11i2.581.

¹⁵ Yulia Ainur Rofiqoh, Istikomah Istikomah, and Hidayatulloh Hidayatulloh, 'Implementation of School Quality Management in Indonesia', *Proceedings of The ICECRS*, 6 (2020), pp. 1-7, doi:10.21070/icecrs2020378.

control must be practiced, taught, and disseminated around the world.¹⁶ The new approach and paradigm in the field of management is the Japanese quality control revolution.

Quality control is defined by Ishikawa as the development, design, production, and maintenance of quality products that are most affordable, most useful, and always oriented toward customer satisfaction.¹⁷ In achieving this goal, all members or employees in the organization must actively promote quality control, including senior management, all departments of the organization, and all employees.

Ishikawa explains some guidelines for implementing quality control:¹⁸

1. Quality control is engaged in the production of quality products that are oriented toward meeting consumer needs. The important thing to remember is that consumers have needs that are not the same every year, meaning that they are constantly changing. Despite changes in industry standards, there are still consumer needs that are not met. Therefore, quality control is very important.
2. Customer focus. Manufacturers should consider consumer benefits when selling their products. Consumers need to be the top priority. Specifically, manufacturers should study consumers' opinions and desires, and take them into account when designing, producing, and marketing products. If making a new product, it is necessary to be precise in taking into account the needs and desires of the market.
3. Interpret quality broadly in all respects. Quality is the term used to express the quality of a product. However, if translated broadly, quality includes work processes, services, information, process quality, human quality, experts, and managers, as well as work system quality, organizational quality, target quality, and others.
4. Low price. If the price of the product is too high, the customer will not be satisfied. It is important to take price into account when determining quality, as the two are interconnected in quality planning and design. There is no quality control that does not consider price, profit, and cost control. Delivering products that do not meet their needs can make customers dissatisfied. To control costs well, we must also control quality well.

Quality control in the broadest sense, including cost control and quantity control, requires the involvement of all departments and employees of the company. Otherwise, quality control cannot be achieved, even in a more limited sense. Therefore, total quality management is also called integrated

¹⁶ Best, M, and D Neuhauser. "Kaoru Ishikawa: from fishbones to world peace." *Quality & safety in health care* vol. 17,2 (2008): 150-2. doi:10.1136/qshc.2007.025692

¹⁷ Ishikawa, Kaoru. *What is total quality control? The Japanese way*. (Englewood Cliffs: Prentice-Hall, 1985), 45.

¹⁸ Ishikawa, 45-46.

quality management, full participation quality management, and management quality management.

Ishikawa adopted and modified Taylor's concept into plan-do-check-action (PDCA). This concept was named the Quality Circle. Later, Ishikawa modified or redeveloped the circle by dividing it into six categories. The six steps are:¹⁹ a) determining goals or objectives, b) choosing methods in achieving goals, c) taking part in quality improvement (training and education), d) implementing work, e) checking the impact of implementation, f) taking good follow-up.

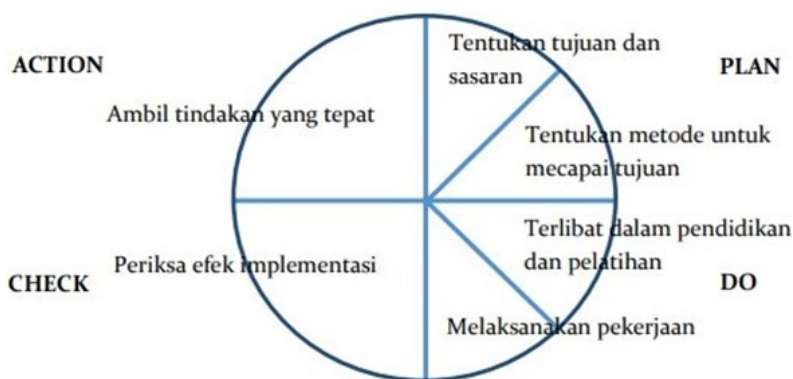


Figure 1. Quality Circle

Ishikawa shows the importance of forming quality control circles in implementing quality control to direct and convey quality control-related information to employees, as well as applying quality control methods such as cause-and-effect diagrams as a step in implementing total quality control.

Implementation of the Quality Control Concept in Educational Institutions

Quality control in education is the effort of educational institutions to monitor the level of quality under their capacity. In maintaining quality, we need to do quality control. Monitoring the quality of education can be done by using various quality control management models. One way to manage is to use the PDCA model (plan, do, check, action). This model can sustainably improve the quality of education.²⁰

The PDCA concept developed by Ishikawa and its six steps can be used as a management method that can be used in quality control. All aspects of development must be carried out correctly and systematically by educational

¹⁹ Ishikawa, Kaoru. *What is total quality control? The Japanese way*. (Englewood Cliffs: Prentice-Hall, 1985), 59.

²⁰ Aminatul Zahroh, 'Total Quality Management: Capaian Kualitas Output Melalui Sistem Kontrol Mutu Sekolah', *CENDEKIA: Journal of Education and Teaching*, 9.1 (2015), p. 79, doi:10.30957/cendekia.v9i1.54.

organizations. Hopefully, the best quality knowledge outcomes can be obtained. Each educational institution seeks to organize quality control based on the circumstances or conditions and strengths or capabilities of the educational institution. It is specifically designed to facilitate quality control activities. School quality can be managed from several aspects as follows: First, quality management cannot provide good results. Second, this type of work is a scientific management process aimed at specific goals after a change in management. Third, quality management is an effort to improve the quality (results) of graduate students. Fourth, quality control is based on the PDCA concept and pays attention to the 5M elements, namely: ways or methods, money, materials, machines, and people.²¹

Concept of the Quality Control Circle Kaoru Ishikawa

Ishikawa participated in the quality control study groups workshop training program in the 1950s. Later, the group changed its name to the Quality Control Circle activity in 1962, April. Quality control circles became the main tool for quality control in the Japanese manufacturing industry in the 1960s and 1970s. It influenced the development of the industry at large. Ishikawa in his book explains that the quality control circle can be applied in all contexts and is not limited to Japan. According to him, this is because of the common nature and intellect shared by humans, and not because of the culture or labor of a country. Previously, he thought that quality control circles were only suitable for Japan, but the facts found later made him change his opinion.

Ishikawa in his book entitled *Introduction to Quality Control*, describes the quality control circle as a small group of people in the same work group who voluntarily perform quality control activities. This small team develops and has a positive impact as part of Total Quality Control activities in the company. They use quality control tools to continuously monitor and improve work with everyone's participation.²²

Quality control circles require an important aspect, namely voluntary participation. Ishikawa explains that the work philosophy also includes a fun workplace, adds value to life, and upholds humanity. The utopian sentiment carries the understanding that productivity and efficiency should be a priority in measuring business processes or operations effectively and a clue in considering the human element of an organization.

Organizational management needs to consider Maslow's Hierarchy of Needs within the institution. This means that personal development within the organization is very important. Ishikawa created a quality control loop that covers all aspects of quality improvement, including quality assurance in

²¹ Shigeru Mizuno, *Sejarah Pengendalian Mutu Terpadu Di Jepang*, Terjemah: Eko Henriyanto Dan BN. Marbun, (Jakarta: PT. Gramedia, 1993). 13-14.

²² Ishikawa K, Loftus JH. *Introduction to Quality Control*. (3rd ed. 3A Corporation; 1990). 179.

new product development. Thus, the quality control circle can be a communication point that connects the application of Total Quality Control (TQC) or Company-wide Quality Control (CWQC).²³

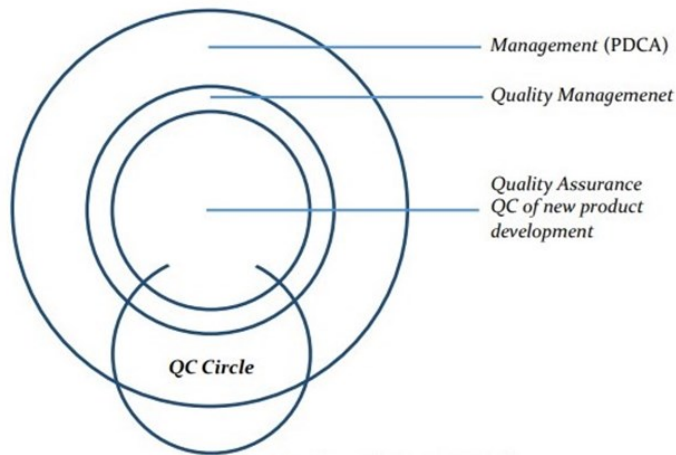


Figure 2. Company-Wide Quality Control (CWQC)

The central circle is the essence of quality control, which includes quality assurance in a narrow sense, achieving good quality control of the company's products. The second circle broadly defines quality control, including sales quality, marketing quality, effective and efficient office employees, and effective subcontractor management. In the third circle, the sense of quality control becomes broader. The third circle quality control is carried out at all stages of work and becomes effective through the PDCA cycle (plan, do, check, and act). Furthermore, the quality control circle is a circle that intersects other circles. The quality control circle is a component of quality control activities that are implemented as a whole in the company.²⁴

Implementation of the Quality Control Circle Concept in Educational Institutions

Ishikawa's concept of quality control circles can be applied to improve the quality of educational outcomes, namely the application of quality control circles. Currently, this quality control is better known as the Quality Control Group (QCG). The responsibility for quality control is held by this group. In order to perform its duties effectively, the QCG must include people who want to improve quality according to Ishikawa's wishes. In the field of education (schools/madrasas), it can be implemented by senior leaders such as principals and vice principals. In higher education or campus structures, it

²³ Balbirnie and others. 4.

²⁴ Ishikawa, *Introduction to Quality Control*, 45.

can be done at the department/project level by LPM (Quality Assurance) and GKM (Quality Management Group).

Quality graduates can be produced by schools by ensuring the implementation of quality education. The quality of education will be guaranteed if the principal/madrasah or the highest management official can carry out quality control well and is supported by quality education components so that there is a synergy that focuses on the quality of education. The relationship between leaders and all academic members in educational institutions.²⁵

Kaoru Ishikawa's Cause and Effect Diagram Concept as a Quality Control Tool

Cause and Effect Diagram is a quality control method developed by Kaoru Ishikawa. In its development, the concept of cause and effect diagrams spread and was used in various industrial sectors in Japan. The cause and effect diagram has a broad focus, not only for quality control problems but can be implemented into a variety of problems and find solutions. Effective implementation of cause and effect diagrams is a key point in introducing quality control activities.²⁶ Kaoru Isikawa developed the Cause and Effect Diagram in 1943. Ishikawa explained that different factors of production can be sorted and connected.

Cause and effect diagrams are closely related to the context of quality, but cause and effect diagrams can be implemented in any context and any condition because cause and effect diagrams can rationally explain the relationship between cause and effect. Armed with its rational method, cause and effect diagrams can be implemented not only for quality problems, but also for quantity problems, material quantity, work safety, workplace attendance, or any personal problems. The purpose of implementing cause and effect diagrams is to get optimal results, through proper identification of a problem. Problems cannot be solved unless we understand the relationship between the cause and effect of the problem. Cause and effect diagrams can be a clear problem identification tool so that the problem can be followed up with quick and appropriate action.²⁷

Ishikawa's Cause and effect diagrams are practically designed with a focus on identifying an in-depth understanding of the events that occur in the process. Cause and effect diagrams allow users to effectively outline problems through a matrix of cause and effect relationships. Cause and effect diagrams can also be used to identify root causes by focusing on internal team problems or quality control circles.

²⁵ Roni Harsoyo.

²⁶ Kaoru Ishikawa, *Guide to Quality Control* (Tokyo: Asian Productivity Organization, 1976), 27-28.

²⁷ Ishikawa, 26.

Cause and effect diagrams can be implemented to analyze inputs (management, environment, materials, people, processes, and equipment) and accurately describe the results. The diagram is used to increase employee participation or activity and facilitate process understanding. It makes it possible to identify the root causes of problems or production defects, identify the kinds of problems, and identify important loci for collecting data. With this way of working, it is possible to list problem causes and improvement solutions. The work process should be conducted in an open and equal discussion format to gather everyone's ideas and input. Ishikawa argues that open communication within the group is crucial for drawing up the right diagrams. These diagrams are very important, not only as a visual aid for teamwork but also for understanding the causes of deviations in the work process in detail.²⁸

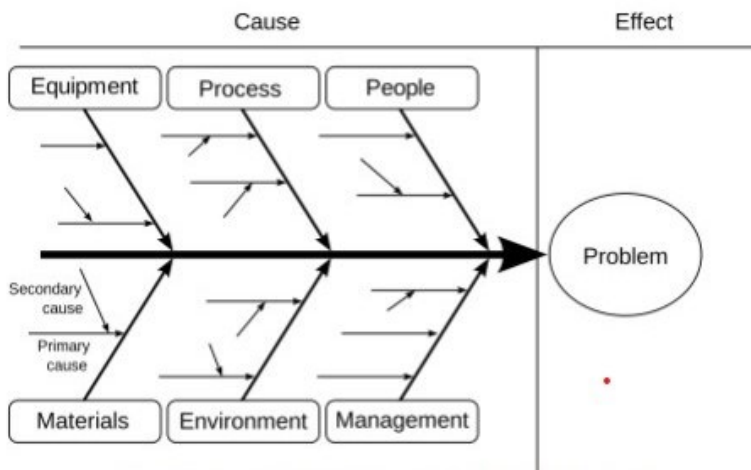


Figure 3. Cause dan Effect Diagram

Horizontal arrows pointing to the right mean problems with the final effect or output. Furthermore, some arrows are drawn diagonally from the bottom or top pointing to the center line. There are six arrows (three below, three above) representing management, environment, materials, people, processes, and equipment.

The causality group arrow displays a small arrow pointing in the direction of the causality arrow. The design is a classic layout of the Ishikawa diagram design that serves as a manufacturing problem analysis tool but can be modified to fit any type of analysis or desired conditions. What is special about this diagram is that it includes a fractal analysis system, which is a

²⁸ M Best and D Neuhauser, 'Kaoru Ishikawa: From Fishbones to World Peace', *Quality and Safety in Health Care*, 17.2 (2008), pp. 150 LP - 152, doi:10.1136/qshc.2007.025692.

design with the same similar pattern but at a different scale. Theoretically, it would be possible to extend the analysis in all directions.²⁹

Implementation of the Cause and Effect Diagram Concept in Educational Institutions

The implementation of the concept of cause and effect diagrams in educational institutions has been widely carried out as a problem identification tool so that the results of in-depth identification related to the problems of the institution will be obtained. Including research conducted by Erika Mei Wati and Bahtiar Agung Pambudi entitled The Development of Ishikawa Diagrams as an Effort to Improve School Quality, more clearly, the results of related research can be observed in the following figure and summary description:³⁰

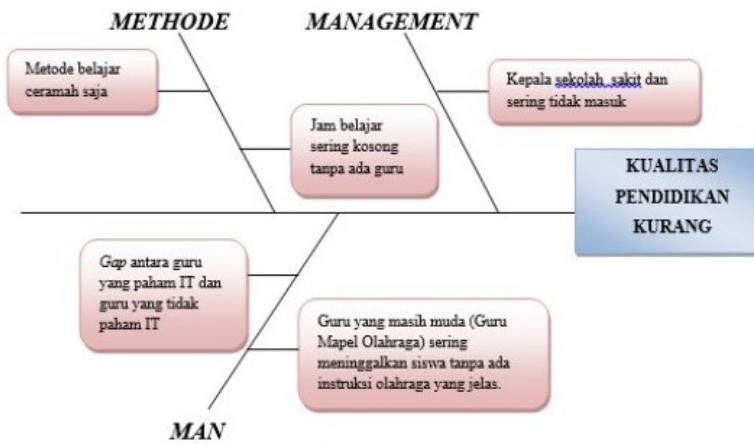


Figure 4. Education Quality Analysis Results

The data obtained through the Ishikawa diagram when examining the problems and causes at SDN Jatipelem II, it was found that the cause of the first problem at the school came from (1) Methods the learning methods applied at the school. Mostly always in the form of lessons, the class teacher then gives homework to students and the second cause of the problem is that sports teachers at SDN Jatipelem II tend to ignore the schedule of sports lessons, namely students can only play on the field, without any indication of the sports equipment they must have. The cause of this problem is thought to

²⁹ Balbirnie and others.

³⁰ Erika Mei Budiarti and Bahtiar Agung Pambudi, 'Pengembangan Diagram Ishikawa Sebagai Upaya Peningkatan Mutu Sekolah', *JDMP (Jurnal Dinamika Manajemen Pendidikan)*, 6.2 (2022), pp. 149-60, doi:10.26740/jdmp.v6n2.p149-160.

be the lack of teacher participation in training and seminars that discuss various creative, innovative, and fun teaching models and techniques. The second problem at SDN Jatipelem II comes from the management, in this case, the top management, namely the school principal.

Another possible cause of the problem was that the new principal was ill and had to be hospitalized several times, so he was often absent and could not directly and continuously control the activities of the school he led. The third problem comes from the human resources of SDN Jatipelem II. The main cause of the problem is the gap between teachers who understand technology and those who do not. Teachers who understand the use of learning technology are young teachers who perform better than older teachers who do not understand the use of technology to facilitate the learning process. The cause of this problem is often the chaos when adding interesting learning materials, entering student learning results into the computer, and when other administrative problems must be resolved with the use of technology.

Another problem that occurs in item man is that the young PE teacher often leaves the class. Leaving class here can happen when there is no teacher during PE time in Grade 1 to Grade 6. Learners are on the field without instruction or guidance from the teacher. Another sign of a problem in PE coming from the teacher is the students' worksheets that remain blank for the entire school year without any discussion of the material or questions that the students should have done.

Conclusion

Kaoru Ishikawa's educational quality development consists of the concept of quality circles, namely plan-do-check-action (PDCA) as a quality control tool, the concept of quality control circles which is a design that cuts across all areas of quality improvement as a Total Quality Control (TQC) or company-wide quality control (CWQC) tool in educational institutions, and the concept of cause and effect diagrams as a means of identifying problem-solving in organizations or educational institutions are concepts that can be implemented to improve the quality or quality of educational institutions effectively and efficiently.

This paper is expected to have implications for adding to the treasury of knowledge in the field of education management, especially the concepts of developing quality education, especially the perspective of Kaoru Ishikawa. The concept of quality development is expected to be a reference or a solution to the problem of low-quality education in Indonesia.

This research has limitations in the use of methods, the method used is a literature study. Therefore, this research is only limited to collecting data from existing literature. Therefore, the researcher suggests that for future research, the results of this study can be used as a basis for conducting field research on how to apply the concept of Kaoru Ishikawa's quality development perspective.

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