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Quality Culture Leadership in the Industrial Revolution 4.0

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Abstract: Leadership is the heart of the success of a school, the head must be able to embed values in improving the quality of services to the users of the school services in the era of the 4.0 Industrial Revolution today. Research aims to know the leadership of the school principal in developing quality cultures facing the 4.0 Industrial Revolution at the Primary School (SDN) Jatimulyo 3 Malang and Islamic Primary School (SDI) Surya Buana Malang. The method used in this study is qualitative with a type of symbolic interaction study. Data collection techniques are carried out through interviews, observation, and documentation. The results showed that the quality culture developed at SDN Jatimulyo 3 Malang there are three cultures, namely: (1) religion; (2) nationalists; and (3) literacy. Meanwhile, SDI Surya Buana Malang has twelve quality cultures developed, namely: (1) habituation of reading prayers, asmaul husna and memorize juz 30; (2) the habituation of prayers every day; (3) day inspiring stories; (4) Friday charity program; (5) daily prayers; (6) study in Javanese, English, and Indonesian Language; (7) outbound implementation a year twice; (8) the implementation of empirical studies; (9) the implementation of thematic contextual learning; (10) ceremony activities every Monday; (11) scout activities; (12) technology, information, and communication.

Keywords: leadership, principals, quality culture, industrial revolution 4.0

I. INTRODUCTION

The more human day needs are increasingly diverse, one of which is the need for education. Awareness of education is characterized by high demand for quality education. The school as a formal education organizer is required to give birth to generations who are not only intellectually intelligent but also emotionally and spiritually. The high demand for quality education will affect the emergence of various public and private schools of competing quality. This is coupled with the emergence of the 4.0 industrial Revolution where life is closely related to technology mastery or all-time automation. The school competed to increase its quality to follow the development of the 4.0 Industrial Revolution.

The increasing quality of the school will relate to the high community demands on the effectiveness, efficiency, and accountability of overall school management. Therefore, quality schools cannot be detached from the hands of high-school principals to develop the quality of the school. According to [1] The principal is a teacher who gets additional duties as the principal. It is hoped that the headmaster can lead the school to create quality cultures. Quality culture begins with the establishment of school culture. The concept of school culture is used to see the direction of the scrolling of both positive and negative changes that occur in school as well as a capital to evaluate continuously for quality improvement [2].

Quality culture that successfully developed by the Headmaster should be able to follow the demands of education expected in the era of the 4.0 Industrial Revolution. According to [3]the focus of the expertise of the 21st century education field currently includes creativity, critical thinking, communication, and collaboration (4Cs). In addition, [4] mention that there are

at least nine skills that the leader must have in welcoming the 4.0 industrial Revolution, such as Leadership, Digital Literacy, Communication, Emotional Intelligence, Entrepreneurship, Global Citizenship, Problem Solving, Team-working.

The quality culture applied by the principal should be able to collaborate with the concept of TQM and the 4.0 Industrial Revolution. The TQM concept emphasizes continuous improvement in customer service. According to [5] TQM is used to meet the needs of customers, the steady work culture must be built and developed well with the rest of the members involved in education. Motivation, attitude, willingness, and dedication to meet the needs of customers are part of the working culture.

School culture and high working culture in a school will bring out the quality culture that affects the quality of the school. Quality culture cannot be detached from the role of the headmaster as a leader. [6] It was explained that principals in quality culture demonstrated efforts to innovate and complete attention to school environment, public relations, teacher education, student achievement, and student progress. These efforts are a must-have representation of the leader or principal in the era of the 4.0 industrial Revolution which, according to [7], should at least be combined with eight learning focuses, self-directed (the Learning occurs because of the perceived needs of learners), multi-sources (using various sources, media, and learning Chanel), life-long learning, ICT base (learning using information technology) , motivation, attitude towards change, adaptive, has a growth mindset instead of fixed mindset.

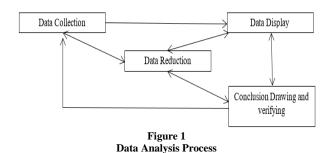
II. METHOD

The approach used in this study is a qualitative approach with the type of multicase research to examine



the phenomenon occurring in the field. Multicase studies so that data analysis is done twice i.e. individual case data analysis and cross-case data analysis. The presence of researchers in the field in qualitative research is very important. Researchers are key instruments that plan, implement, collect data, and make reports in a study. As a key instrument, researchers directly engage in interviews, observations, and request documents necessary for analysis, as well as documenting the implementation of activities in the school. Data sources are sourced from principals (key informant), teachers, and students' parents.

The data processing in this research is done by classifying interviews as well as finding documentation and behavior that can be observed from those examined and then compiled in the form of text with easy informal language Others understand. Researchers use the data analysis process of Miles and Huberman consisting of data reduction, data presentation, and verification. The stages for analyzing data can be described as follows (Figure 1).



The implementation of data analysis is the phase after data from accumulated research. The data analysis is as follows:

1. Data Reduction

Data reduction is a step of choosing the underlying findings and in accordance with the focus of the research, findings come from all data collection techniques used by researchers. The data reduction implementation consists of three phases. The first stage is to make a record of the research findings according to the facts. The second stage is to summarize and choose the research findings according to the focus of research. The third stage is coding in the research summary of the findings. The codegranting researchers use the basic data collection techniques that include interviews with code (W), observation/Observation with code (O), and documents with code (D).

2. Display Data

The data Display that is done in this research is to place the findings of the principal culture leadership in the era of the 4.0 Industrial Revolution. The purpose of data display is for the results of data reduction to be more organized and can facilitate researchers in understanding the findings.

3. Data Verification

The final step in data analysis is to verify data from the data display that has been created to the informant, and researchers also compare the results of the

data display to other accurate data sources, such as interviews, observations and documents. This is done so that researchers actually get the information that corresponds to the facts, as well as researchers can answer all the focus of the research.

After the data analysis process is completed, researchers proceed with the validity checking of data. Checking the legality of data conducted by researchers through three phases.

1. Persistence Observer

An observer's persistence is required to check the truthfulness of a data generated on the field diligently, thoroughly, thoroughly, and thoroughly. Researchers want to know the leadership of the quality culture of the school head in the era of 4.0 industrial Revolution at SDN Jatimulyo 3 Malang and SDI Surya Buana Malang, then diligently observe with the parties who have a big role in this matter. Researchers also inquire deeply and record any information and events obtained from the informant. After the researchers noted deeply and understood the information needed, researchers can conclude how quality culture leadership applied to the school principal in the era of the 4.0 Industrial Revolution.

2. Triangulation

Triangulation is checking the validity of data by using multiple data sources, many data collection techniques, many research times, and many investigators. Researchers use data source triangulation and many techniques to get accurate data. Researchers do check for the information obtained, when conducting interviews with students and daughters' officers in the boarding school Syabilurrosyad Malang, researchers confirm the results of the interview with the students of both sons and daughters. In addition, to improve the accuracy of the researchers have conducted observations documentation at SDN Jatimulyo 3 Malang and SDI Surya Buana Malang.

3. Member Checks

A member's verification is conducted by the researcher by requesting the informant approval by the signature on each interview transcripts. After completing an interview with the informant in both schools, the researcher re-asked the interview if he had been matched by the informant by playing back the recording. Furthermore, researchers requested a signature informant as evidence that what the researcher was written was the same as that given by the informant at the time of the interview.

III. RESULTS

Culture is the values that affect society in everyday life. Each organization has a culture developed as one of the differentiators with other organizations, no exception to the school. Each school has its own culture or is commonly called. School culture which includes positive values recognized by the school citizen and is believed to be able to help achieve the objectives of the school.

School culture is closely related to the quality of the school, because the school is said to provide high quality service to the users where the maximum service



becomes a culture. Leaders must be able to conduct leadership to develop the quality culture of the school. As the 4.0 Industrial Revolution grew, a leader should be able to direct the school's quality culture to follow the current technological developments and the use of Big Data identical with the 4.0 Industrial Revolution.

The quality culture developed by SDN Jatimulyo 3 Malang and SDI Surya Buana Malang is realized in the form of a school program. The school program itself is based on the vision and mission of the school combined with the government's character education program. The culture developed at SDN Jatimulyo 3 and SDI Surya Buana Malang differ from one another. These differences are caused by different school conditions or environments. In addition, both have different school backgrounds. From the results of data retrieval that SDN Jatimulyo 3 Malang has three quality cultural programs that are: (1) religious; (2) nationalists; and (3) literacy. Here's the description.

1. Religion

The religious Program at SDN Jatimulyo 3 Malang is implemented in the form of reading the Scriptures every morning and after school by each student and prayer activities in Congregation for the Muslim students, for religious learners Others were given their own guidance by their respective religious teachers. Although it is not a religious-based school, but the headmaster believes that religious values are the basis in fortifying human behaviour in the same time as the current automation. To support this program, the headmaster worked closely with the surrounding community by borrowing mosques near the school. Mosque lending is done because the school condition that does not allow to be built place of worship due to the complexity of the land and to do the development vertically there is no funds fulfilled. As a form of support for the school program, the parents of the joint venture to build a place of ablution in the school despite not having a place of worship at least with the presence of ablution will launch the course of worship in congregation because No need to queue too long ablution in the mosque.

2. Nationalists

Nationalist is a character education that was adopted into a second quality culture embodied in the form of activities before the lesson was to sing Indonesia Raya song and read the heroism-themed book and tell it to the front of the class. In addition, every Friday teachers are obliged to wear batik clothes as a form of love to the cultural heritage of Indonesia. According to school principals, this needs to be done, because the high current of information exchange in the era of the 4.0 industrial Revolution is often someone will lose their nationalization sense and tend to love another culture.

3. Literacy

The literacy activities developed by SDN Jatimulyo 3 Malang are adapted to the development or demands of graduates in the era of the 4.0 Industrial Revolution. The headmaster explains that literacy is done with several stages, beginning with reading heroic and fairytale-themed storybooks every morning before the lesson begins. In addition to reading, students are required

to retell in front of the class or continue the story from the teacher as a form of communication with the teacher and classmates. In addition, learners are in time with computer extracurricular in order to use and utilize technology and information developments. As already known literacy activities are not enough merely read or commonly called data literacy, but also include technology and human literacy.

A little different from the Jatimulyo 3 Malang SDN, SDI Surya Buana developed a culture of more quality into several programs, there are twelve programs that are developed in the Culture of Excellence: (1) habituation of reading prayers, asmaul husna and memorization of the 30 juz; (2) the habituation of prayers every day; (3) day inspiring stories; (4) Friday charity program; (5) daily prayers; (6) study in Javanese, English, and Indonesian Language; (7) outbound implementation a year twice; (8) the implementation of empirical studies: (9) the implementation of thematic contextual learning; (10) ceremony activities every Monday; (11) scout activities: technology, information, (12)communication. Here is more complete explanation.

1. Habituation of Reading Prayers, Asmaul Husna and memorize the Juz 30

As one of the schools based on religion, habituation of reading prayers, Asmaul Husna and memorizing the 30 juz become the most important part that cannot be eliminated from the Quality culture section of SDI Surya Buana Malang. Prayer reading activities are done before and after learning activities, while Asmaul Husna is read before the lesson begins. Memorization of the 30 juz themselves is done before and after learning activities. The headmaster said that if generally religious schools do habituation read prayers and Asmaul Husna. However, SDI Surya Buana Malang added a memorization of 30 juz, so that when graduating students have at least mastered the 30 juz. The principal adds to the knowledge is the most powerful fortress in controlling the behavior in order not to carry out the rapidly growing information in the era of the 4.0 Industrial Revolution.

2. The Habituation of Prayers Every Day

Prayer is indeed sunnah that means when done will be rewarded, if not done will not sin. Although it is Sunnah, the school is obliged to pray, because someone who is praying will be forgiven for his sins. The school not only delivers learners in a good world life through academic ability but also in the afterlife with strong religious knowledge.

3. Inspiring Stories of the Day

An inspirational story of the day is done in every resting hour. The story is played through a class audio read by the teacher through the office. This inspiring story tells the heroism and the story of the Prophet that is expected to inspire learners.

4. Charity Friday Program

Friday's charity program is one of those programs that teach learners to share with each other. In the era of industrial revolution as today, caring for others needs to be improved because often increasing technological developments make human apathy.



5. Daily Prayers

Praying activities daily in congregation is done to balance the worship that is done besides prayer and reading Al-Quran.

6. Language Learning in Javanese, English, and Indonesia Language

Communication is needed in the development of the 4.0 industrial Revolution, therefore, students at SDI Surya Buana Malang are equipped with three languages namely Javanese, English, and Indonesia Language to facilitate communication.

7. Outbound Implementation for Two Times a Year

Outbound activities conducted as one of the programs to train team work both learners and teachers, as a generation of Industrial Revolution 4.0 team work is needed.

8. Implementation of empirical studies

Empirical studies are conducted every final theme, according to the school principal empirical study is mandatory because learning cannot be limited to theory only, but must know the situation in the field.

9. Implementation of thematic contextual learning

The implementation of learning at SDN Surya Buana Malang uses thematic contextual learning, which means that every theme that is discussed is always associated with the daily life of learners so that the sampling and implementation is easier.

10. Ceremony Activities Every Monday

All residents of SDI Surya Buana Malang are required to perform ceremony activities every Monday at 07.00 at the school square. This activity as a form of respect and gratitude towards the previous heroes.

11. Scout Activities

Scout activities at SDI Surya Buana Malang become compulsory program for all students who are held every Friday. This activity is carried out alternately at every level starting at 07.00 until 15.00.

12. Technology, Information, and Communication

The principal said in facing the 4.0 industrial Revolution, the study at SDI Surya Buana Malang prioritizes the utilization and use of technological developments, information, and communication so that when graduating learners can compete with Graduates from other schools both nationally and internationally.

The description above are some of the quality culture developed by the head of SDN Jatimulyo 3 Malang and SDI Surya Buana Malang in the face of the industrial Revolution of 4.0. In order to smooth the quality culture of SDN Jatimulyo 3 Malang and SDI Surya Buana Malang sought several ways, although the characteristics of these two leaders have different characters but, in the outline, can be drawn conclusions Among others applying high discipline not only apply to learners, but all the school citizens are not exempt themselves. In addition, the headmaster leads firmly which means that every rule and decision making is

actually done no compromise for mutual benefit. The principals of the two primary schools tried to be an example for the school members, so that what was said or instructed by the headmaster was not a mere waffle but realized in real action that could be exemplified.

The implementation of quality culture in the 4.0 Industrial Revolution at SDN Jatimulyo 3 Malang and SDI Surya Buana Malang have ups and downs. There are several factors that both support and expect a culture of quality. More details will be described as follows.

- 1. SDN Jatimulyo 3 Malang. Supporting factors: parents who care about the education; the principal has a high commitment in developing quality; master spirit in developing quality; community that supports the development of school quality culture.
- SDI Surya Buana Malang. Supporting factors: parental participation; the school principal who innovates; teachers are highly committed in changing; and communities that are tolerant of school programs.

The supporting factors of both schools in developing quality culture are different, but the two schools 'inhibiting factor is the same outline: land area is still an inhibitory factor in developing quality culture; school-owned funds are the main factor of inhibiting; lack of parental attention; number of educators; and school is not ready to implement full day school.

IV. DISCUSSION

The school's quality culture is born of values that are believed and acknowledged by the school residents to improve quality to achieve the goals of the school. [9] explaining the quality culture is an organizational value system to create a conducive environment for the continuity and sustainability of quality improvement. [10] states that quality culture consists of values, traditions, procedures, and expectations about quality improvement. Quality schools should be able to provide maximum service to users of the service. SDN Jatimulyo 3 Malang and SDI Surya Buana Malang Develop quality culture through the school program. SDN Jatimulyo 3 makes the vision and mission of the school a benchmark in the making of the quality Culture program combined with the obligatory PPK from the government. It is also a benchmark in SDI Surya Buana Malang that in developing the quality culture of the school combined with character education.

[11] explains the vision is the future ideals of an organization. While the mission is the description of vision, to be easily understood by members of the organization. The existence of a quality culture program will indirectly improve the quality of education in schools. The quality culture Program developed by the school should be able to keep up with the times. Currently, the industry is developing the 4.0 industrial Revolution so that a quality school program must be able to follow the development. Authority (2018) states if the membership of the 21st century education currently includes creativity, critical thinking, communication, and collaboration (4Cs).

The improvement of school quality focused on students is also associated with the educational challenges



in the 4.0 industrial era. In addition to the concept of learning that has been governed by the Government, the concept of 21st century learning are as follows (Figure 2).

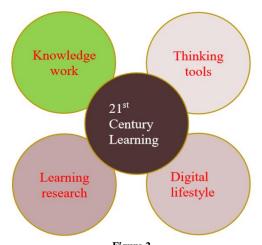


Figure 2
The Concept of 21st Century Learning (Trilling and Fadel, 2009)

Based on the image above, Trilling and Fadel explained that learning in the 21st century rests on digital lifestyle, mindset, and learning research and how it works. Of the four aspects of the image above the digital lifestyle, the way of knowledge, and strengthening the mindset is considered very close to the world of education. The ability to collaborate with the use of digital tools and technology and to utilize and adapt changes in the digital era will be able to bring the students of Indonesia into a superior human resources [12].

The 21st century learning paradigm shift based on 21st century characteristics is the availability of extensive, fast, and easy information then learning should be revamped using an analytical learning method that focuses on Learning that motivates learners to be able to find problems, observe, look for literature and solve analytic problems instead of mechanistic. The use of digital media and social networking is also a supporting learner to find a source of literacy to formulate and solve problems appropriately. Positive communication interwoven is also capable to bring learners thinking collaboratively and integration is not individualist in resolving problems.

The development of the school's quality culture cannot be separated from the intervention of the principal as a leader. The leadership of the headmaster has great influence over a program. The leadership of the school principal at SDN Jatimulyo 3 and SDI Surya Buana Malang is done wisely and firmly in the appropriate decision making for the improvement of the quality of the school in accordance with the development of the 4.0 Industrial Revolution.

This is in line with the opinion [13] stating that the leadership is attributed to three important things, namely: (1) power is power, authority and legality that authorizes the leader to influence and mobilize subordinate to do something; (2) Authority is an advantage, excellence, virtue, so that people are able to "mbawani" or govern others, so that the person is obedient to the leader, and willing to do certain deeds; and (3) ability to be any power, capacity, strength and prowess or technical or

social skills, which are deemed to exceed the ability of ordinary members. In addition to the good leadership from the school principal, the development of quality culture must be supported by the cooperation of all the school citizens. SDN Jatimulyo 3 and SDI Surya Buana Malang in developing quality cultures involve cooperation between all the schools both internal and external. Schools will be difficult to develop without the cooperation of school citizens.

Not only does it focus on the competencies that leaders have in the digital era today, but leaders must also have literacy skills. SDI Surya Buana Malang and SDN Jatimulyo 3 Malang also develop a cultural literacy program. The literary movement is a student who focuses on the integration of book literacy that is integrated with the development of information technology. This is in accordance with the results of the research obtained namely that there is a program of literacy and Utilization of technology (computer) and socialization with the surrounding community (human). The literacy movement is the same as the opinion of [14] which describes that the literacy movement is driven by the progress of the times that switches to digital literacy. This literacy has three main focuses of digital literacy, technological literacy and human literacy.

This literacy movement is not only for learners but also useful for teachers and principals. This digital literacy is a very rich field of material to be excavated and further researched by teachers and principals. The statement reinforced by Gilster in [15] digital literacy can be a reference to research to dominate policies that can be used in schools. Digital literacy has three perspective: (1) operational approaches; (2) skill-oriented; and (3) concept definitions. In the present era, teachers and principals are required for digital literacy based on social interactions and open new literacy spaces to be able to identify and solve problems [16].

In addition to the good leadership from the school principal, the development of quality culture must be supported by the cooperation of all the school citizens. SDN Jatimulyo 3 and SDI Surya Buana Malang in developing quality cultures involve cooperation between all the schools both internal and external. Schools will be difficult to develop without the cooperation of school citizens. It is supported by research delivered by [17] stating that the participation of schools is important to determine the success of implementing the school program. School citizens have their respective roles in order to achieve their objectives. In addition, [5] It also states that the quality of education is influenced by school resources and physical and non-physical factors. The resources include all the school residents, principals, teachers, students, employees, and school committees. Physical factors that affect the means and infrastructures that support a process. Non-physical factors include organizational structure, regulations, task descriptions, vision, mission, and objectives of the school.

The culture developed at SDN Jatimulyo 3 and SDI Surya Buana Malang differ from one another. These differences are caused by different school conditions or environments. In addition, both have different school backgrounds. The concept is the same as the opinion of [18] stating that there are four basic values for the



development of quality culture in the school one of which is the value of autonomy (self-reliance) in which the success of school-based management cannot Separated with school conditions that include factors such as school, school principal, public income, community participation and school budgets and school infrastructure facilities.

V. CONCLUSION

Based on the research done, it can be concluded that the quality culture developed at SDN Jatimulyo 3 Malang and SDI Surya Buana Malang are organized in the form of a school program. The preparation of the school program is based on the vision and mission that schools have. The principal effort to develop a quality culture at SDN Jatimulyo 3 and SDI Surya Buana Malang are both implementing high discipline for each school. In addition, the principal at SDN Jatimulyo 3 and SDI Surya Buana Malang always provide motivation to the school people to be eager to develop the quality culture of the school. Supporting factors in developing quality culture at SDN Jatimulyo 3 and SDI Surya Buana Malang There are 4 namely: (a) the role of parents in developing a culture of school quality is needed; (b) The principal's competence is needed in developing quality cultures; (c) Teachers as educators play an important role in the process of developing quality cultures; and (d) the community is needed to facilitate the process of growing quality culture.

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