

# Leader's Strategy on Establishing Organization's Academic Quality Culture

Achmad Supriyanto <sup>1,\*</sup>, Burhanuddin <sup>1</sup>, Raden Bambang Sumarsono <sup>1</sup>, Sultoni <sup>1</sup>

<sup>1</sup> *Department of Educational Administration, Faculty of Education, Universitas Negeri Malang, Malang, Indonesia*

<sup>\*</sup> *Corresponding author. Email: a.supriyanto.fip@um.ac.id*

**Abstract:** This research aimed at knowing organizational strategies in establishing an academic quality culture. This study employed a descriptive design. The population is 194 people consisted of the school principals, teachers, and staffs of Laboratory school. The 97 samples were taken by using a purposive sampling. The data were collected using a questionnaire and interviews, and then analyzed using a descriptive analysis technique. The results showed that: (1) academic quality culture realized in the academic activities is categorized as good; (2) the activities that are essentially needed in establishing an academic quality culture are in the forms of scientific writing supervising and management strengthening; (3) the main challenge faced was the less supportive bureaucracy in school management; (4) the solution to overcome it is by simplify the bureaucracy; and (5) the appropriate strategy in establishing an academic quality culture by giving opportunities for school stakeholders to enhance the competence in academic field, giving rewards to each member who has achievements, implementing a transplant program and school visit to other better schools.

**Keywords:** strategy, academic quality culture, total quality management, organization

## 1. INTRODUCTION

The realization of academic quality culture in each organization, including educational field, is the future goal of stakeholders in achieving the goals. One of the instruments is by implementing Total Quality Management (TQM) in the system of organizational administration. TQM is an approach, tools, and management to establish the quality culture by conducting process improvement continuously, involving all members, and giving customer satisfaction maximally (Dahlgard et al., 2008; Rasmussen, 2012; Sallis, 2014; Sundarkrishnaa, 2015; Goetsch & Davis, 2016;).

Leaders' strategy in establishing a good academic quality culture can be performed by implementing best practices of total quality management integratively, systemically, and systematically. This is based on the success of *Total Quality Management* (TQM) implementation in the educational field (Hietschold et al., 2014; Sakthivel et al., 2005; Venkatraman, 2007; Winn & Green, 1998). The research results related to the success of TQM implementation in learning showed that: (1) QMS (Quality Management System) in the learning process through the implementation of TQM studied from three aspects, namely: (a) formulation of objectives for improving the quality of institutions; (b) the implementation of basic aspects and TQM principles in QMS; and (c) the supporting elements in TQM implementation on QMS (Supriyanto, 2015). The results can be utilized as an empirical study that in establishing the

supports on the organizational academic quality culture there needs a clear purpose, implementing the existing principles, and getting support from the managerial party.

The laboratory schools are fostered by the Education Laboratory Development Center in higher education. The duties are managing and developing the laboratory schools in administering education starting from laboratory kindergarten, elementary school, junior high school, and senior high school. The school has quite adequate resources, in a good educational environment, has expert developers and supervisors. These schools are expected to become high-quality schools and references for schools in the surroundings. This is reasonable since these schools are supervised by a major higher education and has supervisor status. The higher education has some experts who are significantly relevant to assist in the development and improving the quality of laboratory schools. They can be optimized to always support the improvement of educational quality in laboratory schools. They can be optimized to always support the improvement of the quality of education in laboratory schools.

The results of the TQM implementation in various organizations, including in the laboratory schools supervised by higher education, need to be known by stakeholders. The establishment of an academic quality culture as expected cannot be implemented partially, but thoroughly. When correlated with the education management field, this phenomenon can be analyzed through the benchmarks of the overall scope of the school

management based on TQM in each aspect of the service provided to students, parents of students, and other stakeholders (Bouranta et al., 2019; David Weller, 1996; Kay Michael et al., 1997; Sadikoglu & Olcay, 2014; Seybert et al., 2015). In an effort to develop an academic quality culture in schools, the principals, school committees, teachers and staff, and all stakeholders, prioritizing the commitment related to the thorough concept of the school quality with the activities based on TQM, included in the academic field.

Each educational institution strives for improving the quality of education gradually and in continuous improvement. One of them can be done by establishing academic quality. This is significantly necessary with a variety of considerations, among others, because quality competition in the academic field is getting stronger with each other. In such conditions, the right strategy is needed to build an academic quality culture in order to be able to compete with other institutions or organizations (Gimenez-Espin et al., 2013; Oakland & Tanner, 2007; Sallis, 2014).

Strategy (KBBI, 2016; Kemdikbud, 2017) is defined as: (1) science/art originated from resources (nation) to carry out a policy regulation; and (2) smart planning about activities to achieve specific targets. If it is associated with the word construct, it means as an activity carried out by certain parties to make or make things better. In this context, the target established is the academic quality culture in laboratory schools.

Culture refers to thought, reason, customs, soul, and something that has become a habit (KBBI, 2016; Kemdikbud, 2017). Academic quality culture refers to a character (values, norms, ethics, something that is trusted) that is built and owned by certain organizations, especially academic quality expected. The academic quality culture that is intended is realized and can be seen from various activities of the school's academic community. The intended academic activities can be in the form of research activities by school personnel, leaders, teachers, and students (Ali & Musah, 2012; Mårtensson et al., 2011; Wilson, 2015). Principals can conduct school action research, teachers can produce school action research, and students can make scientific work according to their respective interests. They do not merely conduct the research, but the articles are expected to be presented in seminars and published through proceedings or national and international journals.

One of the strategies in establishing the academic culture in an academic unit is by establishing an academic quality culture based on TQM integratively, systemically, and systemically in long term. The intended strategy is to integrate various scientific activities as a step to build an academic culture based on TQM. Dahlgaard et al. (2008) argued that creating a quality culture in an organization is increasingly recognized as one of the main requirements for the successful implementation of TQM. This shows that culture has an important role in an effort to explore the process of improving new quality to achieve customer

satisfaction. The process of growing the qualified culture at the school, the success can be measured by the indicator of quality and quantity of the scientific work in the school environment.

The concept of quality holds a vital role in the administration of educational administration. The quality service consists of systematic three phases from high to low, namely: fundamental quality, the expected or wanted condition of quality, and the unexpected quality (Angell et al., 2008; Kasiri et al., 2017; Mosadeghrad, 2014; Quinn et al., 2009; Quintal et al., 2012; Voss et al., 2007; Yousapronpaiboon, 2014). The three levels are explained in detail in accordance with the field of study of educational institutions as follows. First, basic quality when applied to the institution of education, access to information about schools must be easily obtained by the community using services from these educational institutions. Giving this service requires these requirements because conceptually the customer or service user can find out how the service will be received. Second, expected quality, if the educational institution is qualified to provide basic quality with easy access to services. This could be with friendly customer service, equipment and infrastructure needed by students and quality expected by parents or all stakeholders. Third, the unexpected quality is the highest level that is the form of service uncommonly performed at school. The process of the school socialization, effective communication, and the existence of rewards have significantly supported this aspect.

The exposure is systematic and systemic, in the process, the school gives the service which is based on the quality to all the clients. In the practice, leveled from the basic quality, which is the quality based on the expectation of the school service users, to the unpredicted quality or incidental (Rice et al., 2017).

In order to achieve a qualified service delivery, the strategy can be realized by applying the visionary paradigm to the prospectus quality continuously through TQM. Adoption of its principles bridges its implementation. An educational institution can use this philosophically and name it itself a Quality Management (Hackman & Wageman, 1995; Sallis, 2014; Sundarkrishnaa, 2015). Based on the concept, the program in establishing the academic quality culture is expected to be able to realize in the organization (Gimenez-Espin et al., 2013; Srinivasan & Kurey, 2014).

Basically, TQM is related to establishing and creating a quality culture (academic). The main demand is that each organizational member can satisfy the customer with the existence of organizational structure support in performing an academic field (Chow et al., 2015; Huang & Rust, 2013; Kyguoliene et al., 2017). TQM is also considered an approach in carrying out a business that optimizes the competitiveness of an organization through an effort to continually improve services, human resources, processes, and environmental conditions. Institutions that use total quality management always prioritize an improvement in a

sustainable and future-oriented manner. Thematically to improve continuous improvement, such as: (1) customer-focused; (2) continuous process; and (3) overall involvement as stated by ( McNally et al., 1993; Arditi & Gunaydin, 1997; Ziegel et al., 1997; Tenner & DeToro, 2000; Goetsch & Davis, 2016; Sallis, 2014; Purushothama & Missing-Value, 2018; ). The essence of TQM is a philosophy oriented on the existence of change culture in the organization, which can reach what is needed and expected by people in the framework of achieving the expected objectives.

The success indicator in implementing TQM is visualized through: (1) the high commitment from all organizational stakeholders (top until down); (2) organizational stability; and (3) high motivation discipline (Hodgson, 2002; Roeleejanto et al., 2015; Sewell & Wilkinson, 1992; Carlos Bou & Beltrán, 2005). In addition, the indicator of the success of the TQM is determined by five pillars, namely: (1) the product being produced; (2) implementation of the process, (3) institutions or organizations, (4) leadership; and (5) high commitment (Sivaram et al., 2014). Teamwork is also one of the crucial components in TQM. TQM is very dependent on teamwork (Belbin, 2012; Costa, 2003; Klein et al., 2009; Nancarrow et al., 2013). Through teamwork, it can achieve goals because every organization without teamwork will fail. There are so many advantages to working in a team. In practice, TQM in the cooperative with an educational institution is one of the most important factors so that the responsibility and also the role of the team members needs to be well defined (Arshida, 2012; Arshida & Agil, 2013; Mosadeghrad, 2013; Sebastianelli & Tamimi, 2003; Sohel-Uz-Zaman & Anjalin, 2016).

The success of TQM application on the organization is due to several causes (Gharakhani et al., 2013; Jamali et al., 2010; Seetharaman et al., 2006; Zakuan et al., 2012). Tjiptono & Anastasia (2015) explain that the constraining factor in implementing TQM, includes: (1) paradigm change, from the aspects of substantially unfulfilled commitment, management, and objectives; (2) unrealism with half-hearted efforts; and (3) delegation from the leadership, including the team, the process of socialization, systematic approach, and immature empowering. The other obstacle for the organization is the creation of environmental conditions to support efforts to improve quality that tend to be less than optimal. In view of the understanding of the strategic plan and dialogic system which is still limited in terms of human resources, the lack of commitment is a complicated matter, besides the information system in management has not been maximally realized. The implementation of TQM in QMS can combine from the model proposed by Tenner & DeToro (2000). The model refers to three central components namely: goals, principles, and elements of TQM. The purpose of the orientation in the context of education is to improve the quality of education as a whole, sustainable, continuous, and integrated. Efforts to realize it

through the application of principles are oriented to the user or user, process orientation, and the involvement of all elements of education in total. Besides that, the leader's role, learning system, training activities, communication, reward system, and benchmarking also become important aspects of the implementation.

In practice, the supporting and constraining factors are surely inseparable from the application of a model or system, similarly with the application of TQM in the educational institution. Several factors in this field have successfully contributed to the study. The research results of Change Management Learning Center (Hiatt & Creasey, 2003) have found that there are five main aspects as supporting change and constraining success variables (the top-five contributors to success and the top-five greatest CM obstacles). Those five factors are the effectiveness of support, the unity of the ranks of managers and employees, special teams, continuous change, and targeted communication, good planning and organized approaches. Several factors constraining organizational change are rejection from employees and staffs, rejection from the middle management, and poor implementer support, time, budget, limited resources, and organizational inertia and politics (Hiatt & Creasey, 2003; Moran & Brightman, 2000; Morrow, 2015). Based on the previous explanation, this research aims at finding the strategies in establishing an academic quality culture based on TQM in the laboratory school.

## **2. METHOD**

Based on the objectives, this research employed a descriptive research design. The research aimed at finding the description in establishing the academic quality culture based on TQM in laboratory schools. The research population consisted of the school principals, teachers, and school academic staffs. The research was conducted in Universitas Negeri Malang laboratory kindergarten, elementary school, junior high school, and senior high school. The population was 194 people and the sample taken 50%, namely 97 people with purposive sampling. They were recorded by the school principals, especially those who were not on duty when the instruments were circulated to respondents.

Instruments are arranged in the form of questionnaires based on aspects of academic quality culture which were described in the theoretical study in this study. First, in relation to the measurement of the profile of academic quality culture, there were 51 closed statement items. Second, related to the program requirements needed. Third, the obstacles encountered in establishing in building an academic quality culture. Fourth, the alternative solutions to

overcome them. Finally, the appropriate strategy formulation to establish academic culture.

The data analysis was conducted by calculating the percentage value of each answer choice to find out the profile of the existing academic quality culture. Next, finding the tendency of answers on the questions related to the required program needs, constraints faced in establishing the academic quality culture, solutions to overcome it, and the appropriate strategy to establish the academic culture in the laboratory schools.

### **3. RESULTS**

Based on the analysis of the measurement of the academic quality culture in laboratory schools, the results are respectively shown as follows.

#### **3.1 Profile of Academic Quality Culture**

The indicators of Academic Quality Culture of Laboratory Schools consist of: (1) Academic quality culture; (2) Academic quality culture as reflected in the vision of the organization (school); (3) Academic quality culture as reflected in the mission of the organization (school); (4) Academic quality culture as reflected in the objectives of the organization (school); (5) Academic quality culture as reflected in the targets of the organization (school); (6) Academic quality culture as reflected in the daily activities of the organization (school); (7) The involvement of the foundation party in formulating an academic quality culture; (8) The involvement of the school principals in formulating an academic quality culture; (9) The involvement of the teachers in formulating an academic quality culture; (10) The involvement of the academic staffs in formulating an academic quality culture; (11) The involvement of the students in formulating an academic quality culture; (12) The involvement of the parents/guardians of students in formulating an academic quality culture; (13) The involvement of the social figures/external school stakeholders in formulating an academic quality culture; (14) Socialization of academic quality culture by the leader to the members of the organization; (15) The integration of the school principals, teachers, and academic staffs in establishing (preparing) the climate of the qualified organizational academic culture; (16) The integration of the school principals, teachers, and academic staffs in establishing (implementing) the qualified organizational academic culture; (17) The integration of the school principals, teachers, and academic staffs in establishing (monitoring) the qualified organizational academic culture; (18) The integration of the school principals, teachers, and academic staffs in establishing (evaluating) the qualified organizational academic culture; (19) Teachers' career path system to support the academic quality culture of the organization; (20) Academic staffs' career path system to

support the academic quality culture of the organization; (21) Integration of academic quality culture in the applied curriculum; (22) Academic quality culture in the process of learning; (23) The atmosphere of academic quality culture in the organizational activities thoroughly; (24) Activities for constructing research proposals for each member of the organization; (25) Activities of research implementation of each member of the organization; (26) Activities of constructing articles from the research results by each organizational member; (27) Publication of article from research results by each organizational member in a scientific journal; (28) Publication of article from research results by each organizational member in a proceeding; (29) Publication of article from research results by each organizational member in a school magazine; (30) The quantity of research implementation during working at the school; (31) The quality of research results during working at the school; (32) The quantity of research article writing generated during working at the school; (33) The quality of article publication from research results during working at the school; (34) The supervision of adolescent scientific writing to students; (35) The quantity of adolescent scientific writing results by students, (36) The quality of adolescent scientific writing results by students; (37) Achievement in the adolescent scientific writing competition by students; (38) Academic Quality Improvement Programs are carried out through activities Brainstorming or Forum Group Discussion (FGD); (39) Priority programs in establishing the academic quality culture; (40) Detailed Work Program and Activity Plans in establishing an academic quality culture; (41) Real acts in establishing an academic quality culture based on the long-term plans; (42) Acknowledgment is given to each idea from students and teachers; (43) Scheduled scientific activities in the customization of scientific writing for the school principals, teachers and students; (44) Literacy movement in schools; (45) The addition of science and knowledge through teaching and learning, extracurricular, and intra-curricular; (46) The addition of science and knowledge of utilizing the latest information; (47) Activities of stakeholders' creativity optimization which support the growth of academic quality culture; (48) The suitability of teaching and learning with the designed learning media; (49) The progress report of implementation in establishing the academic quality culture (achievement level in percentage form); (50) Setting up plans of academic quality culture priority program in the coming periodic year; (51) Generally, academic quality culture before the filling out of this questionnaire.

Based on the analysis results, it shows that the academic quality culture in the laboratory school shows the value of 6.99% categorized as not good, 18.73% categorized as not good, 52.81% categorized as good, dan 21.45% categorized as very good. The comparative of academic quality culture in the laboratory school can be seen in Figure 1.

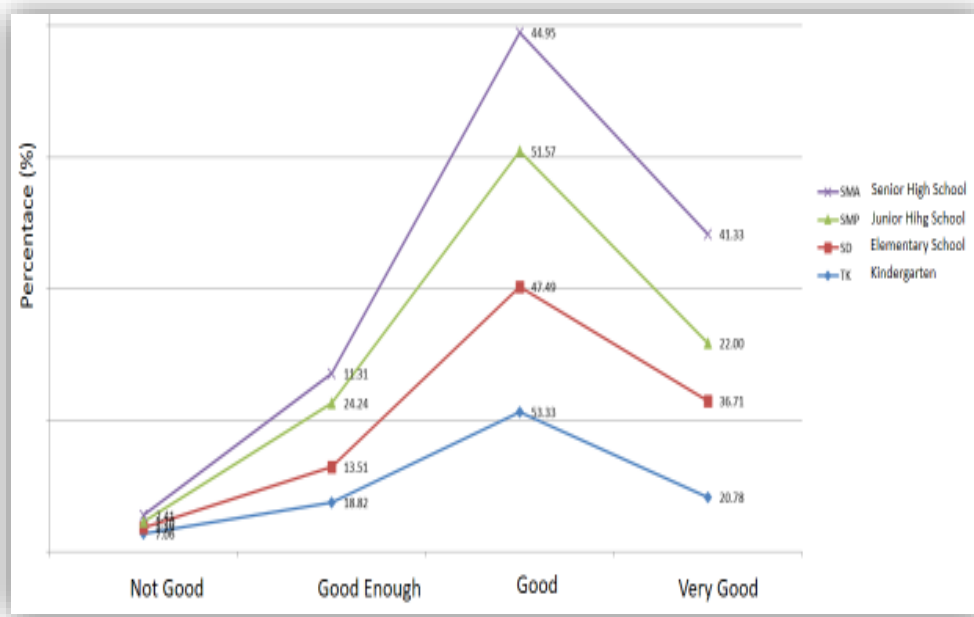


Figure 1 Comparative of Academic Quality Culture in The Laboratory School

Based on Figure 1, indicate that an academic quality culture in the laboratory school can be seen based on four categories. The categories are not good, good enough, good, and very good. The results shown that at each school level, namely: **(1) Kindergarten:** not good is 7.06%, enough category is 18.82%, good category is 53.33%, and very good category is 20.78%. **(2) Elementary School:** not good category is 2.29%, enough category is 13.51%, good category is 47.49%, and very good category is 36.71%. **(3) Junior High School:** not good is 2.20%, enough category is 24.24%, good category is 51.57%, and very good category is 22.00%. **(4) Senior High School:** not good is 2.41%, enough category is 11.31%, good category is 44.95%, and very good category is 41.33%.

Based on the results of the data analysis, it was shown that most of the profiles of academic quality culture were in the category of Good. This can be seen from each percentage of the academic quality culture of each school, namely; Kindergarten is 53.33%, for elementary school is 47.49%, for junior high school is 51.57%, and senior high school is 44.95%. Based on these results, from the four levels of the UM Laboratory school, the cultural profile of academic quality starts from kindergarten, followed by junior high school, elementary school, and ends high school. All the results of the analysis show that the profile of academic quality culture is good. However, because most of them still have a culture of academic quality that is not maximal (very good), it is necessary to propose activities, identify existing obstacles, need alternative solutions to overcome them, and strategies needed to build an academic quality culture in laboratory schools.

### 3.2 Activities in Establishing an Academic Quality Culture

The activities that are essentially needed in establishing the academic quality culture in laboratory schools, namely: (1) seminars related to academic quality culture in laboratory schools; (2) mentoring scientific writing and publication; (3) Habit of writing scientific papers for teachers; (4) Habitual learning using English to support bilingual classroom learning; (5) Procurement infrastructure to support learning activities for teachers and students; (6) The increase in technology utilization and usage; and (7) administrative work supervision based on the management information system, (8) the strengthening of the school administration based on the management information system.

### 3.3 Main Challenges in Establishing an Academic Quality Culture

The main constraint faced in establishing the academic quality culture which can be detailed as the followings: (1) the characteristics difference of students captured the teachers' attention so that there is a limited opportunity to explore other activities; (2) unequal human resources ability, human resources have limited time to explore; and the lack of ability improvement to enhance the academic quality culture; (3) limited infrastructure and the ability to maintain it; and (4) lack of supporting regulation and bureaucracy for managing the laboratory schools, immensely complicated bureaucracy between institutions, and insufficient infrastructure.

### ***3.4 Solutions to Overcome Challenges in Establishing an Academic Quality Culture***

The formulation of alternative solution to overcome the constraints met in establishing the academic quality, namely: (1) the school principal must be able to comprehend all characteristics of the environment and stakeholders in the laboratory school environment; (2) the procurement of application supporting the school administrative work implementation by system; 3) continuous seminars, training, and workshops related to the scientific writing for teachers, followed by the practice of directly making scientific works, participating in teacher scientific competitions, and participating in all forms of competition to explore teacher and student creativity; (4) increasing the number facilities and infrastructure owned by the school in accordance with the need to improve the academic quality culture; (5) maximizing the use of existing school facilities and infrastructure in order to support learning activities to create a good academic culture; (6) simplifying existing bureaucracy, especially between institutions under the auspices of UM; (7) preparing human resources through various competence development activities such as seminars, workshops, training, and benchmarking; and (8) improving the quality of infrastructure to encourage the acceleration in achieving the quality of quality culture in schools.

### ***3.5 Strategies in Establishing an Academic Quality Culture***

The formulation of the appropriate strategy in establishing the academic quality culture in the laboratory schools namely: (1) *workshop* and supervision in teacher scientific writing until the proposal submission in every from of event (competition?) related to creativity in the construction of teacher scientific writing; (2) the joint commitment of the school principals as the leaders followed by all teachers and staffs as well as students to establish a good academic quality culture; (3) the school principals are committed to improve the ability of human resources in various aspects of performance (teachers for learning, academic staffs for administration activities, other staffs according to each of their jobs); (4) the supervision and procurement of supporting management information system software to accommodate the metadata of various forms of information and activities so that the utilization of sophisticated technology can be realized; (5) giving the opportunities widely to teachers and academic staff to improve and develop the competencies; (6) implementing the competition in the academic field between teachers in the environment of laboratory school; (7) giving rewards to excel teachers and academic staffs; (8) implementing the transplant program or internship for teachers; and (9) administering school visit to better

schools seen from both academic and non-academic aspects.

## **4. DISCUSSION**

The results of this research showed that the academic quality culture is included in a good category. Although it is already good, the academic quality culture is still continuously improved to achieve an excellent condition (Sallis, 2014) and all to achieve the best academic quality culture is best to show zero defect (Zairi, 2002; Crosby, 2004). Several aspects can be done to achieve the best academic quality culture, needs some principles in TQM, namely focusing on the customer, involving all members, and doing continuous improvement until a maximum or best point (Sallis, 2014). Strengthened by the research results from (Obiekezie et al., 2016) that the maximum point or the best point of the quality of academic culture according to some lecturers' exposure in Nigeria can be obtained from the availability of adequate and qualified staff, readiness of students' attitudes to study, initial publication of student examination results, availability of laboratories and workshops and the existence of tertiary funding is good for all to control all activities at the school. When starting from the exposure, UM laboratory schools should prepare the variables needed to improve the academic culture in the school from good to more maximum in the achievement.

One of the weak aspects of academic quality culture is on scientific writing and its publication. This result seems like a symptom in general that occurs and is encountered by teachers and academic staffs in various regions in Indonesia, including academics in Indonesia. The ability of teachers in writing scientific papers is also categorized as weak in general. This resulted in their difficulties in fulfilling the requirements for job promotion (Muhali et al., 2019). One of the causes is because the media is still limited, they are still trapped in a routine that is quite time-consuming, not accustomed to raising the occurring phenomenon in the form of scientific work (Rust, 2009; Erdogan, 2010; Zainuddin et al., 2019).

There are in fact several constraints in establishing an academic quality culture, namely the aspects of policy and bureaucracy that support the management of laboratory schools, human resources are not ready to build an academic quality culture, and inadequate infrastructure. This is in line that the constraints faced by teachers in implementing the program establishing the academic quality culture are due to the incomplete comprehension of the related curriculum implementation (Humbert & Chad, 1998; Aithal & Harischandra, 2015; Rahabav, 2016).

If there is a constraint, then an appropriate solution is needed to overcome it. The alternative solution to overcome the constraints in establishing the academic culture is to simplifying the existing bureaucracy. Simplification of bureaucracy in the process of building a culture of academic quality is significantly necessary. As

long as the bureaucracy facilitates the program, it must be fully supported, so that all members of the organization can commit to making it happen. There are three indicators to see that the bureaucracy is good, namely the increase in the quality of public services based on: (1) index of community satisfaction; (2) free of corruption, kinship, and integrity based nepotism and public corruption perception index; and (3) work accountability organization (Dixit, 2010; Frederickson, 2002; Ifad, 1999; Jain, 2004; Zuhro, 2010). There is an easy and uncomplicated bureaucracy perceived to support the implementation of the school program, in which inseparable from the role of a leader. The role of a leader in the educational (school) institution is needed in creating the qualified academic culture. The existence of an easy bureaucracy, competent staffs, and sufficient infrastructure will not perform well when there is no visionary order from the leader of an organization. This is stated the role of a leader has a very significant impact on the process of internalizing the quality of culture in an organization (Amabile & Khair, 2008; Gao et al., 2011; Little et al., 2016; Qu et al., 2015; Van Knippenberg & Van Knippenberg, 2005). The role of the leader referred as a fundamental strategy to move, grow, and maintain a quality culture in the school so that the environment created can support the entire work process of employees and other stakeholders. The effective leaders can build a quality academic culture. Through the strategy, the leaders form collective visions of advanced teachings to deal with and conducting the actual and expected teaching practices while enriching the life and work in the school (Day & Sammons, 2013; Phillips et al., 2018; Robertson & Briggs, 1998; Shanafelt et al., 2019).

An appropriate strategy to establish the academic culture in the laboratory school gives a wide opportunity to each organizational member. Teachers and academic staff need to be given a qualified space to improve and develop competencies, compete fairly, and professionally, there are rewards for those who excel, conduct transplant or internship programs for teachers, school visits to better schools. They can take part in education and training programmed, phased, and sustainable, supported by the leadership by showing evidence of partisanship in building an academic quality culture (Sallis, 2014). The laboratory school showed that the school can be a place for junior teachers to learn, conduct and obtain learning experience, observation, and a place to implement the theory into practice well (Hofstein & Lunetta, 2004; Roscigno et al., 2006). If it has not been conducted, there is no other reason to do it sooner.

## 5. CONCLUSION

The main conclusion of this research describes that: (1) the academic quality culture is in good condition; (2) the urgently needed activities in establishing the academic quality culture in UM laboratory school is supervision in scientific writing and its publication, and the strengthening

of the school administration based on the management information system; (3) the main constraint found in establishing the academic quality culture is the lack of supporting bureaucracy on managing the laboratory schools, not ready human resources in establishing the quality culture, and insufficient infrastructure; (4) alternative solutions to overcome the constraints in establishing the academic quality by simplifying the existing bureaucracy; and (5) the appropriate strategy to establish the academic quality culture in the laboratory school by giving opportunities widely to school stakeholders in improving and developing competencies, administering competition in academic field between teachers in the laboratory school environment, giving rewards to excel teachers and academic staff, implementing the transplant program or internship for teachers, conducting school visits to better schools seen from the academic and non-academic aspects.

## ACKNOWLEDGMENT

This research is supported by the funding of the Non-tax State Revenue (PNBP) Universitas Negeri Malang (UM) in 2018. Therefore, the authors would like to express the highest appreciation to the Rector and stakeholders of Universitas Negeri Malang by showing commitments in carrying out this research.

## REFERENCES

- [1] Abraham, M., Fisher, T., Crawford, J., Sinclair, J., & Collins, D. (1997). International Journal of Quality & Reliability Management Quality culture and the management of organization change Quality culture and the management of organization change. *International Journal of Quality & Reliability Management Quality Assurance in Education Journal of Organizational Change Management Iss International Journal of Quality & Reliability Management*.
- [2] Aithal, P., & Harischandra, P. (2015). Quality Enhancement in Higher Education Institutions Through Best Practices in Library: A Case of SIMS. *International Journal of Management, IT and Engineering*.
- [3] Ali, H. M., & Musah, M. B. (2012). Investigation of Malaysian higher education quality culture and workforce performance. *Quality Assurance in Education*. <https://doi.org/10.1108/09684881211240330>
- [4] Amabile, T. M., & Khair, M. (2008). Creativity and the role of the leader. *Harvard Business Review*.
- [5] Angell, R. J., Heffernan, T. W., & Megicks, P. (2008). Service quality in postgraduate education. *Quality Assurance in Education*. <https://doi.org/10.1108/09684880810886259>
- [6] Arditi, D., & Gunaydin, H. M. (1997). Total quality management in the construction process. *International Journal of Project Management*. [https://doi.org/10.1016/S0263-7863\(96\)00076-2](https://doi.org/10.1016/S0263-7863(96)00076-2)
- [7] Arshida, M. M. (2012). Critical Success Factors (CSFs) for TQM Implementation: Current Status and Challenges in Libyan Manufacturing Companies. *GSTF Journal on*

- Business Review*. <https://doi.org/10.5176/2010-4804>
- [8] Arshida, M. M., & Agil, S. O. (2013). Critical Success Factors for Total Quality Management Implementation Within the Libyan Iron and Steel Company. *Iss & Mlb*.
- [9] Belbin. (2012). Team Roles at Work. In *Team Roles at Work*. <https://doi.org/10.4324/9780080963242>
- [10] Bouranta, N., Psomas, E., Suárez-Barraza, M. F., & Jaca, C. (2019). The key factors of total quality management in the service sector: a cross-cultural study. *Benchmarking*. <https://doi.org/10.1108/BIJ-09-2017-0240>
- [11] Carlos Bou, J., & Beltrán, I. (2005). Total quality management, high-commitment human resource strategy and firm performance: An empirical study. In *Total Quality Management and Business Excellence*. <https://doi.org/10.1080/1478336042000309875>
- [12] Chow, C. W. C., Lai, J. Y. M., & Loi, R. (2015). Motivation of travel agents' customer service behavior and organizational citizenship behavior: The role of leader-member exchange and internal marketing orientation. *Tourism Management*. <https://doi.org/10.1016/j.tourman.2014.12.008>
- [13] Costa, A. C. (2003). Work team trust and effectiveness. In *Personnel Review*. <https://doi.org/10.1108/00483480310488360>
- [14] Crosby, D. C. (2004). Quality is easy: The secret of zero defects and the seven laws of defect prevention. In *Rubber World*.
- [15] Dahlgaard, J. J., Khanji, G. K., & Kristensen, K. (2008). Fundamentals of Total Quality Management. In *Fundamentals of Total Quality Management*. <https://doi.org/10.4324/9780203930021>
- [16] David Weller, L. (1996). Benchmarking: A paradigm for change to quality education. *TQM Magazine*. <https://doi.org/10.1108/09544789610152892>
- [17] Day, C., & Sammons, P. (2013). Successful leadership: a review of the international literature. *CfBT Educational Trust*.
- [18] Dixit, A. K. (2010). Democracy, Autocracy and Bureaucracy. *Journal of Globalization and Development*. <https://doi.org/10.2202/1948-1837.1010>
- [19] Erdogan, A. (2010). Variables That Affect Math Teacher Candidates' Intentions To Integrate Computer-Assisted Mathematics Education (Came). *Education*.
- [20] Frederickson, H. G. (2002). Confucius and the moral basis of bureaucracy. *Administration and Society*. <https://doi.org/10.1177/0095399702336002>
- [21] Gao, L., Janssen, O., & Shi, K. (2011). Leader trust and employee voice: The moderating role of empowering leader behaviors. *Leadership Quarterly*. <https://doi.org/10.1016/j.leaqua.2011.05.015>
- [22] Gharakhani, D., Rahmati, H., Farrokhi, M. R., & Farahmandian, A. (2013). Total Quality Management and Organizational Performance. *American Journal of Industrial Engineering*. <https://doi.org/10.12691/ijcn>
- [23] Gimenez-Espin, J. A., Jiménez-Jiménez, D., & Martínez-Costa, M. (2013). Organizational culture for total quality management. *Total Quality Management and Business Excellence*. <https://doi.org/10.1080/14783363.2012.707409>
- [24] Goetsch, D. L., & Davis, S. B. (2016). Quality Management for Organizational Excellence: Introduction to Total Quality. *Pearson*. <https://doi.org/British Library Cataloguing- In Publication data>
- [25] Greeks, A., Ci, R., & Management, T. Q. (1996). Total Quality Management: A Continuous Improvement Process. *PHCC Educational Foundation*.
- [26] Hackman, J. R., & Wageman, R. (1995). Total Quality Management: Empirical, Conceptual, and Practical Issues. *Administrative Science Quarterly*. <https://doi.org/10.2307/2393640>
- [27] Hiatt, J. M., & Creasey, T. J. (2003). Change management: the people side of change. In *Prosci Learning Center Publications*.
- [28] Hietschold, N., Reinhardt, R., & Gurtner, S. (2014). Measuring critical success factors of TQM implementation successfully-a systematic literature review. *International Journal of Production Research*. <https://doi.org/10.1080/00207543.2014.918288>
- [29] Hodgson, D. (2002). Disciplining the professional: The case of Project Management. In *Journal of Management Studies*. <https://doi.org/10.1111/1467-6486.00312>
- [30] Hofstein, A., & Lunetta, V. N. (2004). The Laboratory in Science Education: Foundations for the Twenty-First Century. In *Science Education*. <https://doi.org/10.1002/sc.10106>
- [31] Huang, M. H., & Rust, R. T. (2013). IT-Related Service: A Multidisciplinary Perspective. *Journal of Service Research*. <https://doi.org/10.1177/1094670513481853>
- [32] Humbert, M. L., & Chad, K. E. (1998). Determining barriers to implementing quality daily physical education. *ICHPER -- SD Journal*.
- [33] Ifad. (1999). Good Governance: An Overview. *International Fund for Agricultural Development Executive Board Sixty-Seventh Session*.
- [34] Jain, A. (2004). Using the lens of Max Weber's theory of bureaucracy to examine E-Government research. *Proceedings of the Hawaii International Conference on System Sciences*.
- [35] Jamali, G., Ebrahimi, M., & Abbaszadeh, M. A. (2010). TQM implementation: An investigation of critical success factors. *ICEMT 2010 - 2010 International Conference on Education and Management Technology, Proceedings*. <https://doi.org/10.1109/ICEMT.2010.5657534>
- [36] Kasiri, L. A., Guan Cheng, K. T., Sambasivan, M., & Sidin, S. M. (2017). Integration of standardization and customization: Impact on service quality, customer satisfaction, and loyalty. *Journal of Retailing and Consumer Services*. <https://doi.org/10.1016/j.jretconser.2016.11.007>
- [37] Kay Michael, R., Sower, V. E., & Motwani, J. (1997). A comprehensive model for implementing total quality management in higher education. *Benchmarking for Quality Management & Technology*. <https://doi.org/10.1108/14635779710174945>
- [38] KBBI. (2016). *Badan Pengembangan dan Pembinaan Bahasa*. Badan Pengembangan Dan Pembinaan Bahasa, Kementerian Pendidikan Dan Kebudayaan Republik Indonesia.
- [39] Kemdikbud, B. P. dan P. B. (2017). *Arti kata bebas - Kamus Besar Bahasa Indonesia (KBBI) Online*. Kbbi.Web.Id.
- [40] Klein, C., DiazGranados, D., Salas, E., Le, H., Burke, C. S., Lyons, R., & Goodwin, G. F. (2009). Does team building work? *Small Group Research*. <https://doi.org/10.1177/1046496408328821>
- [41] Kyguoliene, A., Zikiene, K., & Grigaliunaite, V. (2017). The influence of perceived benefits on the satisfaction with the loyalty program. *Engineering Economics*. <https://doi.org/10.5755/j01.ee.28.1.14635>



- [42] Little, L. M., Gooty, J., & Williams, M. (2016). The role of leader emotion management in leader-member exchange and follower outcomes. *Leadership Quarterly*. <https://doi.org/10.1016/j.leaqua.2015.08.007>
- [43] Mårtensson, K., Roxå, T., & Olsson, T. (2011). Developing a quality culture through the scholarship of teaching and learning. *Higher Education Research and Development*. <https://doi.org/10.1080/07294360.2011.536972>
- [44] McNally, W., Tenner, A. R., & DeToro, I. J. (1993). Total Quality Management. Three Steps to Continuous Improvement. *The Journal of the Operational Research Society*. <https://doi.org/10.2307/2584442>
- [45] Moran, J. W., & Brightman, B. K. (2000). Leading organizational change. *Journal of Workplace Learning*. <https://doi.org/10.1108/13665620010316226>
- [46] Morrow, S. (2015). Management of change. *International Journal on E-Learning: Corporate, Government, Healthcare, and Higher Education*. <https://doi.org/10.7748/elcd.1.4.24.s28>
- [47] Mosadeghrad, A. M. (2013). Obstacles to TQM success in health care systems. In *International Journal of Health Care Quality Assurance*. <https://doi.org/10.1108/09526861311297352>
- [48] Mosadeghrad, A. M. (2014). Factors influencing healthcare service quality. *International Journal of Health Policy and Management*. <https://doi.org/10.15171/ijhpm.2014.65>
- [49] Muhali, M., Asy'ari, M., Prayogi, S., Samsuri, T., Karmana, I. W., Sukarma, I. K., Mirawati, B., Firdaus, L., & Hunaepi, H. (2019). Pelatihan Kegiatan Penelitian dan Penulisan Karya Ilmiah bagi Guru Madrasah Aliyah Negeri 3 Lombok Tengah. *Abdihaz: Jurnal Ilmiah Pengabdian Masyarakat*. <https://doi.org/10.32663/abdihaz.v1i1.739>
- [50] Nancarrow, S. A., Booth, A., Ariss, S., Smith, T., Enderby, P., & Roots, A. (2013). Ten principles of good interdisciplinary team work. *Human Resources for Health*. <https://doi.org/10.1186/1478-4491-11-19>
- [51] Oakland, J. S., & Tanner, S. (2007). Successful change management. In *Total Quality Management and Business Excellence*. <https://doi.org/10.1080/14783360601042890>
- [52] Obiekezie, E. O., Ejemot-Nwadiaro, R. I., Timothy, A. E., & Essien, M. I. (2016). Academic Quality Assurance Variables in Nigerian Universities: Exploring Lecturers' Perception. *International Education Studies*. <https://doi.org/10.5539/ies.v9n5p247>
- [53] Phillips, C., Bassell, K., Fillmore, L., & Stephenson, W. (2018). Transforming Leaders Into Stewards Of Teaching Excellence: Building And Sustaining An Academic Culture Through Leadership Immersion. *Contemporary Issues in Education Research (CIER)*. <https://doi.org/10.19030/cier.v11i1.10104>
- [54] Purushothama, B., & MISSING-VALUE, M.-V. (2018). Quality management principle. In *Implementing ISO 9001:2015*. <https://doi.org/10.1201/b18240-4>
- [55] Qu, R., Janssen, O., & Shi, K. (2015). Transformational leadership and follower creativity: The mediating role of follower relational identification and the moderating role of leader creativity expectations. *Leadership Quarterly*. <https://doi.org/10.1016/j.leaqua.2014.12.004>
- [56] Quinn, A., Lemay, G., Larsen, P., & Johnson, D. M. (2009). Service quality in higher education. *Total Quality Management and Business Excellence*. <https://doi.org/10.1080/14783360802622805>
- [57] Quintal, V. A., Sultan, P., & Wong, ho Y. (2012). Service quality in a higher education context: An integrated model. *Asia Pacific Journal of Marketing and Logistics*. <https://doi.org/10.1108/13555851211278196>
- [58] Rahabav, P. (2016). The Effectiveness of academic supervision for teachers. *Journal of Education and Practice*.
- [59] Rasmussen, R. (2012). Total quality management. *SMT Surface Mount Technology Magazine*. <https://doi.org/10.5958/2348-7534.2014.01294.x>
- [60] Rice, J. B., White, A. G., Scarpati, L. M., Wan, G., & Nelson, W. W. (2017). Long-term Systemic Corticosteroid Exposure: A Systematic Literature Review. In *Clinical Therapeutics*. <https://doi.org/10.1016/j.clinthera.2017.09.011>
- [61] Robertson, P. J., & Briggs, K. L. (1998). Improving Schools Through School-Based Management: An Examination of the Process of Change. *School Effectiveness and School Improvement*. <https://doi.org/10.1080/0924345980090102>
- [62] Roeleejanto, C., Brasit, N., Payangan, O. R., & Pahlevi, C. (2015). Effects of Leadership, Competency, and Work Discipline on the Application of Total Quality Management and Employees' Performance for the Accreditation Status Achievement of Government Hospitals in Jakarta, Indonesia. *Scientific Research Journal*. <https://doi.org/ISSN 2201-2796>
- [63] Roscigno, V. J., Tomaskovic-Devey, D., & Crowley, M. (2006). Education and the inequalities of place. In *Social Forces*. <https://doi.org/10.1353/sof.2006.0108>
- [64] Rust, F. O. C. (2009). Teacher research and the problem of practice. *Teachers College Record*.
- [65] Sadikoglu, E., & Olcay, H. (2014). The Effects of Total Quality Management Practices on Performance. *Laboratory Management Information Systems: Current Requirements and Future Perspectives*. <https://doi.org/10.1155/2014/537605>
- [66] Sakhivel, P. B., Rajendran, G., & Raju, R. (2005). TQM implementation and students' satisfaction of academic performance. *TQM Magazine*. <https://doi.org/10.1108/09544780510627660>
- [67] Sallis, E. (2014). Total quality management in education: Third edition. In *Total Quality Management in Education: Third Edition*. <https://doi.org/10.4324/9780203417010>
- [68] Sebastianelli, R., & Tamimi, N. (2003). Understanding the Obstacles to TQM Success. *Quality Management Journal*. <https://doi.org/10.1080/10686967.2003.11919072>
- [69] Seetharaman, A., Sreenivasan, J., & Boon, L. P. (2006). Critical success factors of total quality management. *Quality and Quantity*. <https://doi.org/10.1007/s11135-005-1097-2>
- [70] Sewell, G., & Wilkinson, B. (1992). Someone to Watch Over Me: Surveillance, Discipline and the Just-in-Time Labour Process. *Sociology*. <https://doi.org/10.1177/0038038592026002009>
- [71] Seybert, J. A., Weed, E. J., & Bers, T. H. (2015). Benchmarking in Higher Education. In *Handbook on Measurement, Assessment, and Evaluation in Higher Education*. <https://doi.org/10.4324/9780203142189.ch8>
- [72] Shanafelt, T., Trockel, M., Ripp, J., Murphy, M. Lou, Sandborg, C., & Bohman, B. (2019). Building a Program on Well-Being: Key Design Considerations to Meet the Unique Needs of Each Organization. In *Academic Medicine*. <https://doi.org/10.1097/ACM.0000000000002415>
- [73] Sivaram, N. M., Devadasan, S. R., Muruges, R., Karthi,

- S., & Sreenivasa, C. G. (2014). Synergising total productive maintenance elements with ISO 9001:2008 standard based quality management system. *TQM Journal*. <https://doi.org/10.1108/TQM-08-2012-0059>
- [74] Sohel-Uz-Zaman, A. S. M., & Anjalin, U. (2016). Implementing Total Quality Management in Education: Compatibility and Challenges. *Open Journal of Social Sciences*. <https://doi.org/10.4236/jss.2016.411017>
- [75] Srinivasan, A., & Kurey, B. (2014). Creating a culture of quality. *Harvard Business Review*. <https://doi.org/10.1891/9780826129673.0012>
- [76] Sundarkrishnaa, K. L. (2015). Total quality management. *Springer Series in Materials Science*. [https://doi.org/10.1007/978-3-319-14069-8\\_9](https://doi.org/10.1007/978-3-319-14069-8_9)
- [77] Supriyanto, A. (2015). Implementation of Total Quality Management in the Learning Quality Management System in Educational Institutions. *Jurnal Cakrawala Pendidikan*. <https://doi.org/10.21831/cp.v1i1.4188>
- [78] Tenner, A. R., & DeToro, I. J. (2000). Total Quality Management: Three Steeps to Continous Improvement. In *Massachuset: Addison-Weley Publishing Company*.
- [79] Tenner, A. R., & DeToro, I. J. (2000). Process Redesign: The Implementation Guide for Managers. In *Engineering Process Improvement Series*.
- [80] Thapa, T. B. (1970). Total Quality Management in Education. *Academic Voices: A Multidisciplinary Journal*. <https://doi.org/10.3126/av.v1i0.5314>
- [81] Tjiptono, F., & Anastasia, D. (2015). Pelanggan Puas? Tak Cukup! *Widya Cipta: Jurnal Sekretari dan Manajemen*. <https://doi.org/10.31294/WIDYACIPTA.V2I1.2684.G2034>
- [82] Van Knippenberg, B., & Van Knippenberg, D. (2005). Leader self-sacrifice and leadership effectiveness: The moderating role of leader prototypicality. In *Journal of Applied Psychology*. <https://doi.org/10.1037/0021-9010.90.1.25>
- [83] Venkatraman, S. (2007). A framework for implementing TQM in higher education programs. *Quality Assurance in Education*. <https://doi.org/10.1108/09684880710723052>
- [84] Voss, R., Gruber, T., & Szmigin, I. (2007). Service quality in higher education: The role of student expectations. *Journal of Business Research*. <https://doi.org/10.1016/j.jbusres.2007.01.020>
- [85] Wilson, F. (2015). The quality maturity model: Your roadmap to a culture of quality. *Library Management*. <https://doi.org/10.1108/LM-09-2014-0102>
- [86] Winn, R. C., & Green, R. S. (1998). Applying total quality management to the educational process. *International Journal of Engineering Education*.
- [87] Yousapronpaiboon, K. (2014). SERVQUAL: Measuring Higher Education Service Quality in Thailand. *Procedia - Social and Behavioral Sciences*. <https://doi.org/10.1016/j.sbspro.2014.01.350>
- [88] Zainuddin, Z., Suryadi, S., & Fuad, N. (2019). Program Evaluation of Continuing Professional Development at Teacher Working Group. *International Journal for Educational and Vocational Studies*. <https://doi.org/10.29103/ijevs.v1i2.1524>
- [89] Zairi, M. (2002). Philip Crosby (1926-2001): Testimony to a quality guru. *The TQM Magazine*.
- [90] Zakuan, N., Muniandy, S., Mat Saman, M. Z., Md Ariff, M. S., Sulaiman, S., & Abd Jalil, R. (2012). Critical success factors of total quality management implementation in higher education institution: A review. *International Journal of Academic Research in Business & Social Sciences*.
- [91] Ziegel, E. R., Tenner, A., & DeToro, I. (1997). Process Redesign. *Technometrics*. <https://doi.org/10.2307/1271527>
- [92] Zuhro, R. S. (2010). Good Governance dan Reformasi Birokrasi di Indonesia. *Jurnal Penelitian Politik*.