

Quality of Vocational School Education in Bandung City

Siti Nurlatifah, Dedy Achmad Kurniady

Universitas Pendidikan Indonesia

Bandung, Indonesia

sitinurlatifah14@gmail.com

Abstract—Education in Indonesia still has problems in terms of distribution, relevancy, efficiency, and quality of education. There are still problems regarding the quality of education in vocational school specifically in Bandung City, such as the quality of process in which teacher has vital role in improving the quality of learning process. Cited from *Kasubdit Banglemsidiklat* posited that in Bandung, there were 63% vocational school teachers who did not have required standard of professional competencies'. The quality of education in this research examines the quality of education based on the quality of student and teacher, learning environment, school discipline, the availability of learning resources, parents' participation, and unit cost. Methodology used in this research is descriptive with quantitative approach while the sample is 32 school principals. The result of research shows that the dimension of quality is low in which the quality of student got the mean score at 4.32 based on some categories there are curriculum, the quality of learners, the quality of educators, the work environment of school discipline, availability of degree, parent participation, and quality of unit cost. the conclusion of this research is the Quality of School at Vocational High School in Bandung is in very high category which is supported by good quality components.

Keywords—*quality; vocational school*

I. INTRODUCTION

Talking about the quality of education, it will directly relate with school role as an educational institution. The management of learning process in the school is predominant for determining a student achievement. In this term, school has an important role in creating student who has knowledge, skill, religious value, and high social value. Therefore, school is a social agent which should be considered in terms of its learning process.

Quality is conformance to mission specification and goal achievement within publicly accepted standards of accountability and integrity [1].

There are many problems in the vocational schools, such as the lack of graduated junior high school students who continue to vocational schools according to data from education authority in 2015/2016 in which the students who continued in senior high schools was higher than that of in the vocational schools at 63,090 and 57,913 respectively.

Besides, the quality of education can be examined form the quality of process in which teacher has vital role in improving

the quality of learning process. According to *Kasubdit Banglemsidiklat*, revealed that 63% vocational school teachers did not have the required standard of professional competencies.

According to Central Bureau of Statistics, the dropout rate in 2015 that 7-12 years old children reached at 0.67% or 182,773 children; 13-15 years old children at 2.21% or 209,976 children; and 16-18 years old children at 3.14% or 223,676 children. Based on those data, it revealed that the highest dropout rate was in 16-18 years old children which was in line with vocational school students [2].

Besides that, there is also problem in the quality of vocational school alumni in Bandung city. Even though 2015/2016 national examination of vocational schools in Bandung City showed 100% success, it could not be considered as a good output quality because there were students who got 1.25 in national examination (Statistic data from Vocational High School Negeri 3 Bandung)

Conversely, the quality of outcome from vocational schools (SMK) are still colored in the low quality of school or education in Indonesia. Central Bureau of Statistics (BPS) states that the level of open unemployment (TPT) in August 2015 reached 7.56 million people or increased 320,000 people compared with August 2014. The highest unemployment was the graduation of vocational schools (SMK). According to Bureau of Statistics (BPS), the level of open unemployment by the graduate of vocational schools reached 12.65% from the total of unemployment. The total of vocational school's graduate was indeed increasing compared with the period of August 2014 at 11.24% and February 2-15 at 9.05%. In the second place was the graduate of senior high school (SMA) at 10.32%. In Bandung City, the level of unemployment was respectively followed by graduate of diploma I/III at 7.54%, university at 6.40%, junior high school at 6.22% and elementary school or under at 2.74%.

From various explanations above, the system of quality control and quality assurance in education becomes the main issue in the context of education nowadays. The quality of education which is visible certainly focus on the quality of graduate from education itself. In order to produce a qualified graduate, it should be supported by a qualified process. The process of qualified education must be certainly supported also by the qualified supporting factors.

According to Hoy & Miskel, there are many factors which influence the quality of school such as organization culture, principal leadership, organization climate, facility and infrastructure, teacher performance and financial [3].

A cost and the quality of education have direct relation. According to Morphet, “education cost gives positive influence through leadership factor, educational management, and also a competent academic staff in improving education service through quality improvement” [4].

In order to achieve the good quality of education, it is needed education aspects supporting its improvement. From phenomenon above, therefore, the authors are keen on to conduct a research about the quality of education on vocational schools in Bandung City.

II. METHOD

Design in this research is started from conducting preliminary study to identify and determine a problem. The method used in this research is descriptive method with quantitative approach. Population in this research is the vocational school principals in Bandung City about 134 principals. Then, the sample is taken by using Probability Sampling Technique through Simple Random Sampling with the result about 32 respondents.

Sampling technique in this research is Probability Sampling through Simple Random Sampling. This technique provides equal opportunity for each element (member) of the population to be elected as a sample member and done randomly regardless of the strata in the population. Roscoe in the book "Research Methods for Business" provides suggestions on sample size for the following research [5]:

- The appropriate sample size in the study is between 30 to 500.
- If sample is divided into categories (e.g. men-women, civil servants-private and others) then the number of sample members per category of at least 30.
- If the research will do multivariate analysis (correlation or multiple regression for example), then the number of members of the sample at least 10 times the number of variables studied. For example, there are 5 research variables (independent + dependent), then the number of sample members = $10 \times 5 = 50$.
- For a simple experimental study, which uses experimental and control groups, the total sample members are between 10 and 20 each.

Instrument used in this research is questionnaire. Questionnaire is a data collection technique conducted by creating several questions or statements which is afterwards distributed to respondents to get the answers [5].

Through the method of distributing this questionnaire, the researchers expect to get a picture of the quality of school data there are portrait of curriculum quality, the quality of learners, the quality of educators, the work environment of school discipline, availability of degree, parent participation, and quality of unit cost.

III. RESULTS AND DISCUSSION

In educational field, the quality involves input, process, output and outcome. The input of qualified education is all things which can be processed by education system. Then, the process of qualified education can be seen if the education system which is held can give contributions, such as active, creative, and has significance mean for educational aim.

Besides that, Ali stated “strategic factors which influence the quality of education is curriculum/learning process, school management, school organization/institution, facility and infrastructure, financial, student, society’s role, and school culture”. The quality of education in this research perceives the quality of education from the quality of student and teacher, school environment, school discipline, the availability of learning resources, parents’ participation, and unit cost.

Based on the obtained finding from data analysis of this research on the quality of education on the vocational schools in Bandung City draws through the questionnaire method that the mean result at 4.63 which is in the very high category. It is shown from the mean score of dimensions: the quality of education at 5.00, the quality of student at 4.32, the quality of teacher at 4.70, the working environment at 4.84, the school discipline 4.56, the availability of learning resource at 4.56, parents’ participation at 4.72, and unit cost at 4.72 which will be explained as shown in Figure 1 below.

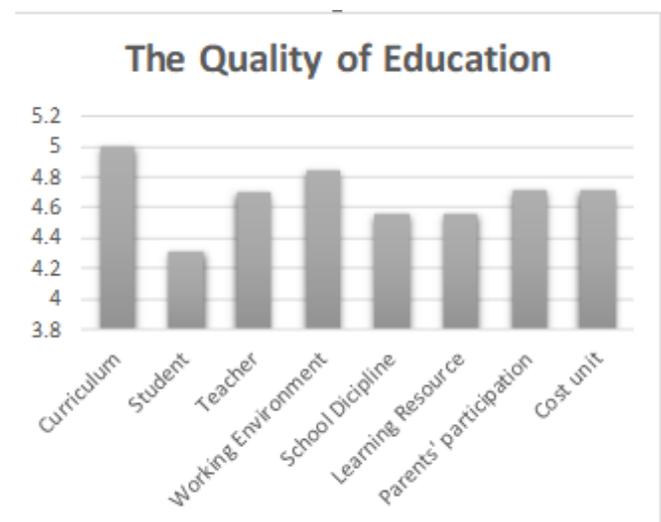


Fig. 1. The description on the quality of education on vocational school in Bandung city.

The mean score of education quality is higher than of the other dimensions while the lowest dimension is the quality of student. It is shown that the tendency of quality curriculum on the vocational schools in Bandung City is already corresponding with the created curriculum is already referred to main curriculum, and the curriculum developed in the school is associated with government policy.

The quality of vocational school students in Bandung City is the lowest indicator from other indicators. It is associated with the problem revealed by authors that the dropout rate in the vocational schools in Bandung City is still high, and the score of national examination still tends to be low in which

there was student who got score at 1.25 in the score of national examination (statistic data from SMKN 3). Then, based on Central Bureau of Statistics in 2015, the highest unemployment was the graduates from vocational schools which reached at 12.65%.

In detail, every dimension in this research will be explained as shown below:

A. Curriculum Dimension

The curriculum dimension is at 5.00 in the very high category. It shows that curriculum dimension in improving education has vital role. From dimension above, it is safe to conclude that curriculum in the level of vocational schools in Bandung City still becomes predominant aspect in the education implementation in the school known that curriculum becomes guidelines in the education implementation in the school. It is associated with statement of Carla Figueiredo, Carlinda Leite and Preciosa Fernande that “the curriculum has been target of social and political demands due to its central role in school education and to the changes that occurred in education over the 20th century [6]. The changes include more autonomy assigned to schools and teachers and the establishment of educational standards”.

B. Dimension of Student Quality

Based on the calculation using WMS technique (Weighted Means Score) shows that the mean score is 4.32 in very high category. It illustrates that the quality of student based on the result of final examination, dropout rate, school and graduation rate. Therefore, the result tendency of student quality indicator can be categorized very high.

However, if it is compared with other dimensions in this research, the dimension of student is categorized low in compare with other dimensions.

The nation’s school infrastructure is in a state of critical disrepair. By infrastructure is meant the basic physical facilities that underpin the school plant (plumbing, sewer, heat, electric, roof, masonry, carpentry). Schools seem to be deteriorating at a faster rate than they can be repaired, and faster than most other public facilities [7].

In student dimension, there are several indicators which influence the students in improving the quality of education such as the examination result, the rate of dropout and graduation, the rate of class repeating, the student achievement, the student pervasive score. From all those indicators, the rate of dropout and graduation is considered low at 4.03 compared with other indicators (all indicators score can be seen in the appendix).

If it is analyzed, the low rate of dropout and graduation score is associated with the problem which put forward by the authors. The dropout rate is still high because there are many poor students who cannot continue their education due to the lack of financial support. Besides, the authors also posit that based on Central Bureau of Statistics data stating that the level of open unemployment in August 2015 reached 7.56 million people or increased 320,000 people from that of in August 2014. The most unemployment occurred on graduations of

vocational schools. Based on Central Bureau of Statistics data, the level of open unemployment on the vocational schools reached 12.65% from the total of unemployment.

In improving the good quality of student, it must consider input, process, output and outcome. The concept of quality recurs frequently in international educational discourse. For example, the World Educational Forum on Education for All (EFA) has addressed quality education in its EFA framework and goals. The framework has six goals; Goal 6 calls for: ‘Improving every aspect of the quality of education, and ensuring...excellence so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills’ [8].

C. Teacher Dimension

Based on the calculation using WMS technique (Weighted Means Score), the dimension of quality teacher shows the mean score at 4.70 in very high category. It illustrates that the teachers in the vocational schools in Bandung City have already educational background which are suitable in their teaching role in the school.

The correlation of teacher educational background is one of indicators from teacher dimension with indicator rate at 4.58 compared with other two indicators, such as the type of upgrading at 4.70, and teaching load at 4.81. The compatibility of education on the vocational school teachers is still low from other two indicators. It is associated with survey conducted by Tjutju Yuniarsi, et al. “there are 268 teachers in 26 vocational schools majoring business expertise and management in Bandung City, Bandung Region, West Bandung Region and Cimahi Region that 24% teachers do not have correlation between their duty and their educational background”. In other words, it becomes problem as the background of this research.

Based on the statement from Joo, Hyun-Jun, Oh, Beom-Ho and Yun, Ching-II “As for teachers, a similar evaluation to that of professors has to be implemented and it has to be linked with the incentive system for teachers [9]. This is because pursuing the qualitative improvement of school education without the qualitative improvement of teachers is impossible”. This statement supports that one of education quality particularly in teachers learning is the important aspect in improving their quality.

D. Dimension of School Environment

Based on the calculation using WMS technique (Weighted Means Score), the dimension of school environment shows the mean score at 4.84 in very high category. It illustrates that school environment in the vocational schools in Bandung City is already conducive. Every school has already established school culture which is delight matching the school vision and mission for the teachers and particularly for the students in the learning process. Therefore, the tendency of indicator result on school environment can be categorized very high.

Ariel Tichnor-Wagner, Christopher Harrison, and Lora Cohen-Vogel said that “have documented correlations between cultures of learning and positive academic outcomes for students, studies have also suggested that creating and

sustaining cultures of learning can be challenging in today's current "top-down" accountability context focused on academic achievement [10]. For example, in the past two decades professional learning communities (PLCs), cohesive, collaborative groups with a shared learning-oriented vision that "permeates the life of teachers, students, and school leaders" have become increasingly popular among schools working to increase teacher, and ultimately student, learning."

E. Dimension of School Discipline

Based on the calculation using WMS technique (Weighted Means Score), the dimension of school discipline shows the mean score at 4.56 in very high category. It illustrates the vocational schools in Bandung City can create maximum discipline for academic staff using rules and punishment given as corresponding with the school vision and mission, and the rule is implemented in assertive way.

School discipline entails more than punishment. It is complex and includes developing student self-discipline [11]. Discipline and its opposite, indiscipline, are transactional phenomena nested in classroom, school, and community ecologies. The interactions that produce disciplined behavior (or indiscipline) are mediated and/or moderated by the development needs of students; teacher, student, and school culture; student socioeconomic status; school and classroom composition and structure; pedagogical demands; student and teacher role expectations and capacity to meet the institutionally established expectations for their roles; and school climate. These transactions can involve issues of student-school fit; bonding to school; academic demands; school support for at-risk youth; differential beliefs and responses of adults to challenging behaviors; and race, gender, and cultural factors [12-17]

In educational realm, work discipline is an obedience of educational actors and the reflected responsibility from the awareness and trust in performing task as a dedication for the truth values, either for the interest of school, state, nation or based on the interests of religious life. One aspect of employees' internal relation which is difficult to be performed is discipliner action. If the level of school discipline is high, it will help in improving the quality of school.

F. Dimension of the Learning Resources Availability

Based on the calculation using WMS technique (Weighted Means Score), the dimension of the learning resources availability shows the mean rate at 4.56 in very high category. It illustrates that the vocational schools in Bandung City has already fulfilled the students' need in terms of the learning resources availability. The indicator of this dimension which support the quality of school are the completeness and the condition of the room at 4.66, the availability of sport and playground facility at 4.75, the total of the owned facilities at 4.22, and the facility utilization at 4.59.

If we see how big the indicator from the dimension of learning resources availability, the vocational schools in Bandung City are the lowest level because the total of facilities which is available in the school is still low. Then, this condition must be highlighted or becomes school awareness in improving

the availability of learning resources because this indicator will also influence the quality of school.

As Ethiopian Ministry of Education to ensure the quality of education, students should have quality textbooks, instructional materials and other school facilities in sufficient quantity and quality [18]. Hedges and Theoreson also argue that, the adequacies of school facilities do not a guarantee for student's academic performance but the proper utilization of the facilities has a great value [19]. As indicated above, to improve the quality of education, the availability of school facilities and the proper management of these resources should give a great attention. Improving the quality of education, therefore, has become the burning issue of the time. Quality education depends on a complex combination of factors that come together at the school and classroom levels. The most important of these factors is widely understood to be quality of school resources.

As for the facility which must be completed by the vocational schools is matching with the act of national education minister no. 40 2008 about the standard of facility and infrastructure vocational school/vocational *madrasah aliyah* (SMK/MAK).

G. Dimension of Parents' Participation

Based on the calculation using WMS technique (Weighted Means Score), the dimension of parents' participation shows the mean score at 4.72 in very high category. It illustrates that the vocational schools in Bandung City can cooperate and empower the parents' participation in maximal. The participation of the parents towards school can be applied by an event which will tie among stakeholders (the students' parents and society) either through meeting or letter which can support the service.

According to Iain Morris "Education and Public Relations are strange bedfellows Education is solid, purposeful, concerned with the public good and consistent with its public spiritedness it is altruistic [20]. PR is ephemeral, self-interested, selling things (or acceptance of things) you don't necessarily want to 'buy'. It's more about double glazing, politics and the nuclear industry than about education. Yet in the social circumstances of the 1990s - at a time when flux and change are integral parts of the educational dynamic - the survival of many institutions within the education system might depend on the ability to embrace PR and operate it effectively".

Pradhan et al. have shown the potential that reaching out to education stakeholders outside the school committee—and especially the village council—has in improving student learning, to programs in which the school committee was limited to providing advice and oversight and in which teacher hiring remained out of the control of the school [21-25].

Using the highest score in the dimension of parents' participation in the vocational schools in Bandung City, it can be analyzed that the participation is already done by the school. Therefore, the parents' participation also has contribution in improving the quality of school.

H. Dimension of Unit Cost

Based on the calculation using WMS technique (Weighted Means Score), the dimension of unit cost shows the mean score at 4.72 in very high category. It illustrates that the vocational schools in Bandung City in implementing school events can obtain funds from government or the students' parents, and school also can maximally utilize that funds.

Managing and administering the distance system is cost intensive. Lentell and Welch and Reed classified the activities where student administrative cost are incurred as operational issues such as: finance, student recruitment, enquiries processing, enrolment, materials development, materials manufacture, tuition and support, assessment, technology and governance and management structure [26,27]. An institution should work towards ways of proper management of the variable costs of student administrative support, so as to reduce cost without it affecting its quality. These variable contacts include face-to-face contact, phone contact, email and web selfservice. It is only through proper analysis that these variables can be properly managed and still maintains the quality of student support services. Also, it includes the management of the variable cost of academic staff [28].

If the unit cost obtained has already fulfilled the needs expensed the unit cost either micro or macro, the school program will be stable and support improvement of the quality school continually because the expense is closely related with the quality of school. Abbreviations and Acronyms

IV. CONCLUSION

The quality of school on the vocational schools in Bandung City is in the very high category. It means that curriculum, the quality of student, the quality of teacher, the discipline in school working environment, the learning availability, parents' participation, and unit cost have already been in the very high category. All of those are supported by society's participation which mostly chose public school or private school with the financial support from government due to financial reason.

Based on those results, the dimension of student quality obtains the mean score at 4.32 because the indicator in this dimension is the examination result on several vocational schools in Bandung City have not fulfilled the standard, besides the dropout rate is still high due to several reasons. One of which is the lack of financial to pay the school and there are also students who are dropout and above 5% students cannot graduate in every year. If it is compared with other scores, the score of student quality dimension is still low.

REFERENCES

- [1] E.G. Bogue and K.B. Hall, *Quality and accountability in higher education: Improving policy, enhancing performance*, Westport, CT: Praeger, 2003.
- [2] Bandung Central Bureau of Statistics 2015 about dropout rates, 2015.
- [3] W.K. Hoy C.G. Miskel, *Educational Administration: Theory, Research, and Practice*, New York: McGraw-Hill Csmptions, 2008.

- [4] E.C. Morphet, *The Economic and Financing of Education*, Fourth Edition, New Jersey: Prentice Hall Inc, 1983.
- [5] Sugiyono, *Metode Penelitian Pendidikan (Pendekatan Kuantitatif, Kualitatif, dan R&D)*, Bandung: Alfabeta, 2013.
- [6] C. Figueiredo, C. Leite and P. Fernande, "The curriculum in school external evaluation frameworks in Portugal and England." *Research in Comparative & International Education*, Vol. II, No.3, pp.282-297, 2016.
- [7] F.C. Lunenburg and A.O. Ornstein, *Educational administration: Concepts and practices*, Belmont, CA: Wadsworth/Cengage Learning, 2008.
- [8] United Nations Educational, Scientific and Cultural Organization (UNESCO), *The Dakar Framework for Action*, Paris: UNESCO, 2000.
- [9] J. Hyun-Jun, O. Beom-Ho and Y. Chung-II, "An Analysis of the Relationship between the Quantity and Quality of Education: focusing on Korea and OECD countries." *Policy Futures in Education Journal*, Vol.8, Number.6, pp. 607-618, 2010.
- [10] A. Tichnor-Wagner, C. Harrison and L. Cohen-Vogel, "Cultures of Learning in Effective High Schools." *Educational Administration Quarterly Journal*, Vol.52, Number.4, pp. 602-642, 2016.
- [11] G.G. Bear, A. Cavalier and M. Manning, *Developing selfdiscipline and preventing and correcting misbehavior*, Boston: Allyn & Bacon, 2005.
- [12] J.S. Eccles, S. Lord and C.M. Buchanan, *School transitions in early adolescence: What are we doing to our young people?* In J. A. Graber, & J. Brooks-Gunn (Eds.), *Transitions through adolescence* (pp. 251-284), Mahwah, NJ: Lawrence Erlbaum, 1996.
- [13] S.A. Hemphill, J.W. Toumbourou, T.I. Herrenkohl, B.J. McMorris and R.F. Catalano, "The effect of school suspensions and arrests on subsequent adolescent antisocial behavior in Australia and the United States." *Journal of Adolescent Health*, vol.39, pp.736-744, 2006.
- [14] S.G. Kellam and Y.V. Van Horn, "Life course development, community epidemiology, and preventive trials: A scientific structure for prevention research." *American Journal of Community Psychology*, vol.25, pp.177-188, 1997.
- [15] C.A. McNeely and C. Falci, "School connectedness and the transition into and out of health risk behavior among adolescents: A comparison of social belonging and teacher support." *Journal of School Health*, vol.74, pp.284-292, 2004.
- [16] D. Osher, G. Cartledge, D. Oswald, A.J. Artile and M. Coutinho, *Issues of cultural and linguistic competency and disproportionate representation*, In R. Rutherford, M. Quinn, & S. Mather (Eds.), *Handbook of research in behavioral disorders* (pp. 54-77). New York: Guilford, 2004.
- [17] R.J. Skiba, R. Michael, A. Nardo and R. Peterson, *The color of discipline: Gender and racial disparities in school punishment*, Bloomington: Indiana Education Policy Center, 2000.
- [18] Ethiopian Ministry of Education, *The Education and training policy and its implementation*, MOE: Addis Ababa, 2002.
- [19] L. Hedges and A. Theoreson, *Achievement in Mathematics, reading and Writing*, NAEP, American Institute for Research, 2000.
- [20] I. Morris, *Education and Public Relations*. *Management and Aducation Journal*, Vol.7, No.3, pp. 7-8, 1993.
- [21] M. Pradhan, D. Suryadarma, A. Beatty, M. Wong, A. Alishjabana, A. Gaduh and R.P. Artha, *Educational Quality Through Enhancing Community Participation: Results from a Randomized Field Experiment in Indonesia*, Jakarta, Indonesia: World Bank, East Asia and Pacific Region, WPS-5795, 2011.
- [22] R. Paes de Barros and R. Mendonca, "The Impact of Three Institutional Innovations in Brazilian Education." In *Organization Matters: Agency Problems in Health and Education in Latin America*, ed. W. D. Savedoff, Washington, D.C.: Inter-American Development Bank, 1998.
- [23] E. Duflo, P. Dupas and M. Kremer, "Additional Resources versus Organizational Changes in Education: Experimental Evidence from Kenya." Unpublished manuscript, Abdul Latif Jameel Poverty Action Lab (JPAL), Cambridge, Mass.: Massachusetts Institute of Technology, 2009.
- [24] E. Skoufias and J. Shapiro, "The Pitfalls of Evaluating a School Grants Program Using Non-Experimental Data." *Policy Research Working Paper 4036*, Washington, D.C.: World Bank, 2006.

- [25] R.J. Murnane, J.B. Willet and S. Cardenas, "Did the Participation of Schools in Programa Escuelas de Calidad (PEC) Influence Student Outcomes?" Working paper, Cambridge, Mass.: Harvard University Graduate School of Education, 2006.
- [26] H. Lentell, Chapter 13: Framing policy for open and distance learning in H. Perraton and H. Lentell, Policy for open and distance learning. World review of distance education and open learning, Volume 4. London: Routledge Falmer/COL. 249-259, 2004.
- [27] T. Welch and Y. Reed, Designing and delivering distance education: Quality criteria and case studies from South Africa, Johannesburg: NADEOSA, 2005.
- [28] J.C. Taylor, "5th Generation distance education: A sustainable approach to development, Presented by Deputy Vice-Chancellor (Global learning services) university of Southern Quesland, Australia," [online] Retrieved from 187H http://www.jointokyo.or/files/cms/news/pdf/1_Prof_Tim_Taylor2.pdf, 2007.