

Sustainability Challenges: An Analysis of the Effectiveness of the Assistance Program for Vocational Schools

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Abstract—Vocational school has play important roles in providing skillful employer for business and industry in most region of the world. Therefore, most of government had specific attention and budget allocated to ensure that the quality of the graduates will meets the requirements of the business and industry. This paper examines the effectiveness of an aid programs for the development of vocational schools. This research use qualitative approach and CIPP evaluation model. The data collection conducted through observation, interview, desk and documents review. By evaluating the implementation of this program we found some evidence that the program was able to open more access to the community and students, where one selected referral vocational school had to have three vocational schools located nearby to become their alliance school. Referral Vocational Schools receive assistance for the development of facilities and infrastructure that can also be utilized by alliance schools. This has been proven to improve the competence of Referral Vocational Schools and alliance schools in providing education services, which in turn has led to greater public trust in the capacity of vocational schools to become educational institution for their children.

Keywords—aid effectiveness; improved access; referral vocational school

I. INTRODUCTION

The level of success of national development in any country is strongly related to the quality of human resources, and Indonesia is not excluded. The State has sought to optimize and maximize the development of Indonesia's human resource capacity through the education sector, both through formal, in-formal and non-formal education channels. Education carried out as far as possible reflects the process of humanizing human beings or in other words actualizing all the potential that he has as a human being into abilities, capacities, competencies that can be utilized in everyday life in society.

To improve the quality of graduates of vocational schools in order to become a reliable workforce and have excellence in the world of work, the government provides assistance funds to enhance the quality of vocational schools. According to Mouzakitis, it is necessary to reduce the gap between academic and vocational education and strengthen the co-

operation between the education authorities and employment organizations as well as industries, and the educational and training reforms that have to be based on the market needs assessment identified by appropriate market research. The involvement of business and industry is very important in the development of quality vocational education.[1]

One of the formal education pathways that prepare graduates to have excellence in the world of work is vocational schools. One of the important objectives of developing vocational education programs is to prepare human resources who are ready to enter the workforce, have high leadership, discipline, skilled, reliable in their fields, productive and professional,. Thus, ideally vocational school graduates are mid-level workers who are ready to use, in the sense that they can directly work in the business world and or industry.

There are six things that become the focus of the referral vocational school development program, which are as follows: 1) service improvement, 2) improvement of school management, 3) improvement of the quality of the learning process, 4) improvement of facilities and infrastructure, 5) improvement of graduates and, 6) referral vocational school as training center. These six foci are then outlined in the School Development Plan (SDP).[2]

School Development Plan or SDP is a new paradigm in the planning of vocational development programs, which among others contains: a) the proposed development program must be performance-based activities, namely placing the priority scale of school development on improving the quality of education as the main achievement compared to investment infrastructure (building or equipment needed); b) consider the efficiency and effectiveness of the use of funds by measuring the achievement of targets by referring to the performance indicators specified; c) carry out monitoring and evaluation to maintain accountability and transparency of program implementation and maintained implementation in accordance with planning; d) considering the sustainability of development programs that have been considered successful over the next 4 years.[3]

In order to ensure that the big goals can be maintained and achieved, the coaching process needs to be carried out on an ongoing basis, this is to achieve the profile or performance of Referral Vocational Schools as a vocational school that has superior performance, has great access, and is effective in institutional management. Also must share the resources they have with their alliance vocational schools so that they can support programs to improve and equalize the quality of vocational schools throughout Indonesia.

Currently there are 12,659 Vocational Schools both private and state throughout Indonesia,[4] and more than 300 thousand vocational education staff.[5] Along with the increase in the number of vocational schools, it is often found that there is an imbalance in the quality of graduates, in addition to the lack of infrastructure and facilities between leading vocational schools and other vocational schools, or even between vocational schools.

The lack of facilities and infrastructure or facilities owned by vocational schools is an important issue that has never ceased to be discussed. There have been a lot of efforts made in order to improve the quality of education, including the government which has issued laws and regulations regarding education include the regulation of the Minister of National Education regulating standards, especially with regard to facilities and infrastructure issues.

Furthermore, one of the problems that occur in the world of vocational education is the similarity of minimum standards of facilities and infrastructure that must be owned and fulfilled by each vocational school. Especially when considering that, vocational schools in addition to producing graduates with integrity, are also an institution to produce of skilled and competent workers to meet the demands and development of the business and industrial world. The quality of graduates who meet the needs of the business world will make the absorption rate of vocational school graduates by the business and industry sectors increase. Based on data from the Directorate of Vocational School Management, the open unemployment of vocational school graduates in 2013 was 11.24% or 1.6% for the average unemployment. This is quite large compared to other graduates.[6]

Shaidullina's research focuses on identifying the characteristics and important parts of the cluster approach in vocational education at a particular regional level which aims to strengthen the network of relationships between cluster members, share knowledge and utilization of infrastructure, accelerate the learning process because these can guarantee and ensure the creation of a process of continuity and integration in one educational industry complex in one integrated area.[7]

The method used in previous studies generally did not reach a more comprehensive study area, in a sense, studies from upstream to downstream. How policies are spawned, implemented, monitored and evaluated in accordance with the plans and mechanisms that are set. The evaluation of the implementation of vocational school development assistance program is research conducted to see the effectiveness of the

program comprehensively in terms of policy aspects, the resources used to the benefits generated by the program.

Other research conducted by Riddell, and Zarazu [8] also Heyneman [9] found the fact that, although in general the aid funds provided were of good purpose, they did not always function properly in all places. Many factors influence the effectiveness of a grant program. While research on grants conducted by Birchler and Michaelowa [10] as well as by Hasbullah et.al [11] shows the importance of the right balance between primary and secondary education levels, also shows the relatively low amount of assistance for secondary education resulting in secondary education graduates not finding suitable work and also not absorbed by the business world and industry as targeted and expected.

By comparison with the previous studies, this research is expected to be able to fill research gaps that have not been analyzed so far. The fundamental difference between this research and previous studies is to see the effectiveness of the program comprehensively from the aspect of policy, the resources used to the benefits generated by the program. This research is expected to provide information on the effectiveness and benefits of the assistance program on the development of referral vocational school.

II. RESEARCH METHOD

Among the definitions promoted by many experts, Stufflebeam, Madaus, and Kellaghan put forward the limitation that an evaluation is a systematic investigation of the merit and/or worth of a program, project, service, or other object of interest. Operationally, evaluation is the process of delineating, obtaining, reporting, and applying descriptive and judgmental information about some object's merit and worth in order to guide decision making, support accountability, disseminate effective practices, and increase understanding of the involved phenomena.[12]

Program evaluation is very important but not all parties can be involved, because there are various considerations and requirements for an engagement effort. The involvement model in evaluation is done because it sees evaluation as a joint effort, involving people inside and outside the organization with varying degrees of expertise in evaluation in a pattern of power-sharing and join learning. Patton identified 9 principles of involving parties in program evaluation, namely: The process involves participants in learning skills; Participants own the evaluation and are active in the process; Participants focus the evaluation on what they consider important; Participants work together as a group; The whole evaluation process is understandable and meaningful to the participants; Accountability to oneself and to others is valued and supported; The perspective and expertise of all person are recognized and valued; The evaluator facilitates the process and is a collaborator and a resource for the team; and the status of the evaluator relative to the team is minimized (to allow equitable participation). [13].

Research data was obtained through interviews, observations, and other supporting documents collected and

reviewed thoroughly. The interviews were conducted on 10 informants who were directly involved in the program implementation, including those who are persons in charge of the program, and recipients of assistance program, which is the Referral Vocational Schools. Research observations were carried out both directly and indirectly towards all stakeholders and beneficiaries of the program. The data analysis procedure used in this study consists of three activities that occur simultaneously, namely data reduction, data display and conclusion drawing/verification, which is in line and accordance with opinion as stated by Miles and Huberman.[14]

This research using the qualitative approach and evaluation model as developed by Stufflebeam, which is CIPP, where the acronym of CIPP itself is consist of Context, Input, Process and Product. The research question for all those stages are, Context: what need to be done? Input: how should it be done? Process: is it being done? Product: did it succeed?[15].

The more details of research question will be consisting of what is the base of implementation of the assistance program for the development of referral vocational school? How the program could be implemented? What is the look like of the program implementation? And what is the achievement gained by the assistance program for the development of referral vocational school?

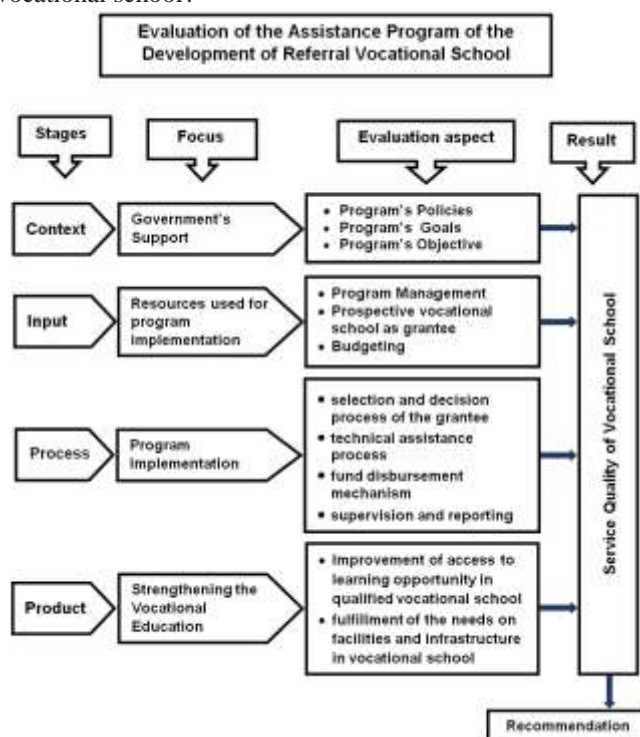


Fig. 1 CIPP model

The CIPP model itself is a framework for comprehensive reporting and evaluation because it has a strong orientation to services, and also has principles that are open to the community. The CIPP model is indeed comprehensive, because this model not only assesses the impact of a program but also helps formulate programs, monitor program

implementation, evaluate program outcomes and provide recommendations for improvement of a program in the future, both for improvement in duplication or replication.

The research design to analyze the effectiveness of the assistance program for the development of referral vocational school with refer to the CIPP model, can be drawn in the scheme in Figure 1.

The foci of the research will consist of: 1) the foundation of program management, include the government's supports; 2) resources utilized on program implementation; 3) the process of program implementation; 4) results and program's achievement on strengthening the vocational education.

III. RESULT AND DISCUSSION

A. The foundation of program management

There are two objective of the assistance development program for vocational school, which is: (1) to support the improvement of access of availability, accessibility and equalization of learning opportunity in a high quality vocational school, (2) to support the fulfillment the needs of educational facilities and infrastructures required on teaching-learning activities in vocational school. The foundation of the program's objectives is as respond to the people's needs regarding lack of access to the high quality of senior high school, particularly the vocational school, as well as the answer for the need of stakeholders, such as school management, student, parents business world and industry, regarding the facilities and infrastructure, other facilities such as library, teaching aid's tools and equipment, practical equipment, as well as well trained, skillful and deep know-how resources on the usage of tools, equipment and machineries, which is used by workforce and industry in their daily activities.

Goals can be translated as a condition that want to achieve or struggling in the future, both by an organization or individual, and for each aims decide by an organization, will be accompanied by several targets. This issue have similarity with the opinion of Pynes [16] who states that goals is a condition that want to achieve or created in the near future, while target is a more specific and shortened aims, thus can be classify as one step toward long term and also can be have general terms and function.

The target of the assistance development program for vocational school is to fulfilling the needs of facilities and infrastructure of the school selected as referral vocational school to achieve the national standard of education and also can be used as training and development center for selected vocational school who have been appointed as alliance or also known as sister school. The source of the aid's funds program is from the state budget of 2016 with total amount is one hundred seventy one billion rupiah, and will be distributed to 171 vocational school selected as referral vocation school throughout Indonesia, where each referral school will receive grant in amount of one billion rupiahs, where the expected result is the development of 171 of referral vocational school achieved. Through the vocational school development system

who has been appointed as a model for other vocational school, and the expected result is the improvement the access and quality of educational services provided by vocational school throughout Indonesia.

The scheme of the foundation of program management can be drawn as follow:

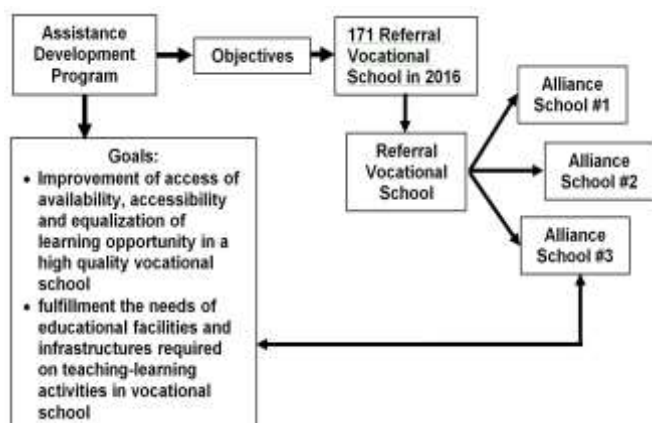


Fig. 2 Scheme of foundation program management

The characteristics of this assistance development program is should be implemented with refer to the presidential decree no 54 of 2010 regarding the government procurement of goods and services with their changes as well as through the Regulation of Minister of Education and Culture number 22 Year 2015 regarding the Strategic Planning of the Ministry of Education and Culture for 2015-2019 as the foundation of this program, as stated in its program, that in each district or city, it is mandatory to have at least one referral vocational school or model, and for each referral vocational school, should have three other vocational school as their alliance or sister school.

The series of laws and regulations show the hierarchy and sequences of policies to ensure that an objective will achieved well, properly and in timely manner, with excellent impact, because already complemented or preceded by the supports of legal and policies foundation which can provide answer, guidance and direction for any requirements as well as to response all potential challenges occur or arising in the field. Those series of law and regulations is in line with terminology of the Food and Agricultural Organization, who said that policies is a series of decisions who have long term orientation, [17]

B. Resource used for the program implementation

The program management involving several stakeholders as program implementing unit, such as the Directorate of Vocational School Management, Provincial Education Desk, District and City Education Desk, Development Unit, Planning and Oversight Team, Procurement unit, Committee to receive the result of work regarding the procurement of tools, equipment and facilities, as well as the School Committee. Every unit has its own tasks, authorities and responsibilities as regulated in the Technical Guidance of the Assistance Development Program for Vocational School.

Furthermore, regarding tasks and responsibilities of the program management, it was clear that the program management is the one who responsible on forming, adjusting or modifying of the program to always meet the institutional strategy and to ensure that all part of the program will avoid from any obstacle and external problems, include uncertainty, and this issue have similarity with the opinion of Pellegrinelli, who said that the program management is the solely responsible unit on forming and implementing of the program and ensure that everything is fit with the program implementation strategy.[18]

Under this program, the usage of fund and its responsibility mechanism has been regulated properly. The resource of fund for this program is from the State Budget through Directorate of Vocational School Management, which total budget allocated is one billion rupiah for each Referral Vocational School. This part as emphasized by Maria and Bleotu who states that one of the main resources to support on educational fund is the state budget (both national or regional), beside resources obtained or provide by community or industry, business unit, or any institutions involve in education activities, include the charity or other external resources in various form, such as grant etc.[19].

The flows of the resources used for this program can be drawn as below:

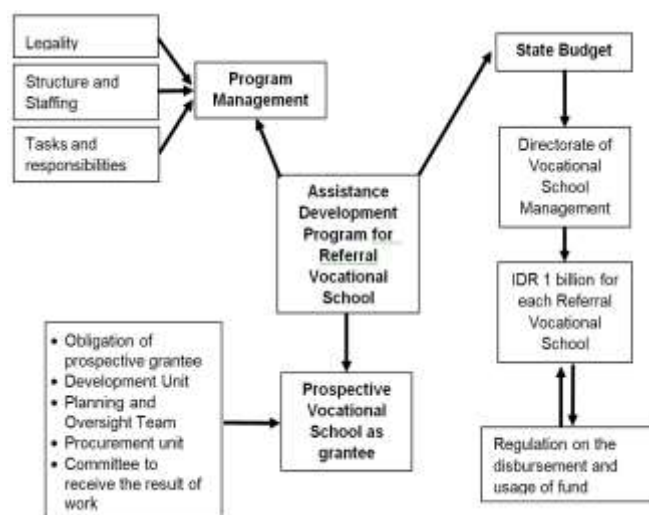


Fig. 3 Flows of the resources

C. Process of Program Implementation

The selection process is an activity to choose and select which vocational school will be decided as the grantee of assistance development program. The selection process will be consist of requirements that should be fulfilled, provided and submitted by prospective grantee, proposal consideration, and verification process on data of prospective grantee until the decision has been made. Selection has been conducted properly, follow all procedures and refer to the criteria and requirement. This is accordance with the opinion of Meiji, Balkin and Cardy regarding selection, which is said that Selection means the process of either hiring or not hiring in what is the second step of the application process by

considering the decision in terms of each case. The selection process might be viewed in terms of the attributes or performance required by the organization.[20] The effective selection process will require the availability of accurate and sustainable information regarding total number, what kind of qualification and criteria will needed and required on managing various activities regarding this assistance development program.

Follow the selection process and decision has been made, the next steps is conducting technical assistance. This process conducted in order to support implementation of assistance development program for selected referral vocational school, where the technical assistance will presented and conducted clearly, regarding strategy on program implementation that should be taken by the referral vocational school.

The governance process of disbursement of aid's funds is carried out strictly and in accordance with the reference applied and enacted, because the fund itself is one of the most important aspects of the incentive mechanism, and as a form of public accountability and ensuring program accountability as well. This is in accordance with the opinion of Sandor which states that funding can be considered as one of the most important incentive mechanisms.[21]

The supervision process provided by the Directorate of Vocational School Management for the program management is in order to ensure that program will be run on the track, properly and in timely manner, as well as all program's objectives achieved. Supervision in a program will support and ensure the achievement of the objectives of the program. According to Rue and Byars, who states that supervision is the first level of management in an organization and is concerned with encouraging the member of a work unit to contribute positively toward accomplishing the organization's goals and objectives. This means that the supervisor does not do the operative work but sees that it is accomplished through the effort of others.[22]

Reporting activities will be gradually and regularly conducted, begin with inception report, then progress report and the final report of the program implementation. The implementation report of the assistance development program is very important because this report will provide comprehensive and clear of data and information regarding the implementation process of the assistance development program for vocational school, from the beginning, the earlt stages of implementation works until all work declared as accomplished and officially handed over and recorded as regional asset. This fulfils the rule of reporting and in accordance with Cemazar opinion, who stated that: As a general rule/guidance in reporting, experimental data should contain details on exposure conditions such that that other researchers are able to evaluate, judge and reproduce the experimnts and data obtained. This type of reporting is necessary for future systematic reviews and/or meta-analyses, which are studies that systematically assess previous research and derive conclusions that cannot be extracted from single studies.[23]

The flows of the process of program implementation can be shown as below:

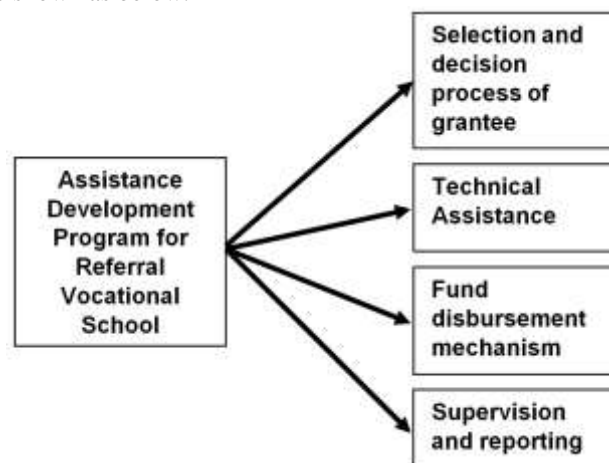


Fig. 4 Flows of the process of program implementation

D. Result of Program's Achievement

By carrying out the concept of willingness to share, the presence of Referral Vocational Schools helps other vocational schools around the area, which are still at pioneers or initial level to also be growth, enhance and improve to be vocational schools that have superior performance, as well as more large and effective access, this is in accordance with the initial purpose of this program where there are vocational schools that can share the resources they have with alliance vocational schools so that they can accelerate the improvement of access and equitable quality of vocational schools in those region.

The presence of Alliance Vocational School with quality approaching the Referral Vocational School, and located nearby or scattered around the Referral Vocational School is increasingly opening up access to school-age children to be able to reach the education services more easily, more economically, with superior quality and well maintained. So, it can be said, that the pattern of collaboration between Referral Vocational Schools and alliance Vocational Schools is like a cluster. This is in accordance with Michael Porter's theory of cluster models, which is A cluster is a group of geographically adjacent, interconnected companies (suppliers, manufacturers and others) and associated organizations (educational institutions, general government, infrastructure companies) operating in a certain area and complementary to each other.[24] This limitation is very suitable to describe the pattern of cooperation between Referral Vocational Schools and its alliance Vocational Schools, along with other government institutions and the business and industry world. The cluster model used by Referral Vocational Schools is in order to share the resources they have with their alliance Vocational Schools, so that Referral Vocational Schools can be more effective, resourceful, accessible, and also enhance the capacity of alliance school.

The fulfillment of the needs on facilities and infrastructure of the Referral Vocational School also has very significant and important role because it can be used as a training center for

vocational school who has been selected as alliance or sister school that have similar vocational expertise, while also realizing quality education which can produce quality graduates who are competent and can compete in the industrial world. This is in line with what was stated by Shaidulina regarding the cluster system, where referral vocational school that use the cluster model can help teaching-learning process at vocational school become more effective, thus the vocational school can improve the competitiveness of graduates or can produce quality graduates with expertise fulfilling the needs of industry, beside that through this cluster system, the vocational school will be able to cooperate with other vocational school, such as the referral vocational will cooperate with its alliance vocational school.[25]

The flows of the results of program's achievement can be shown as below:

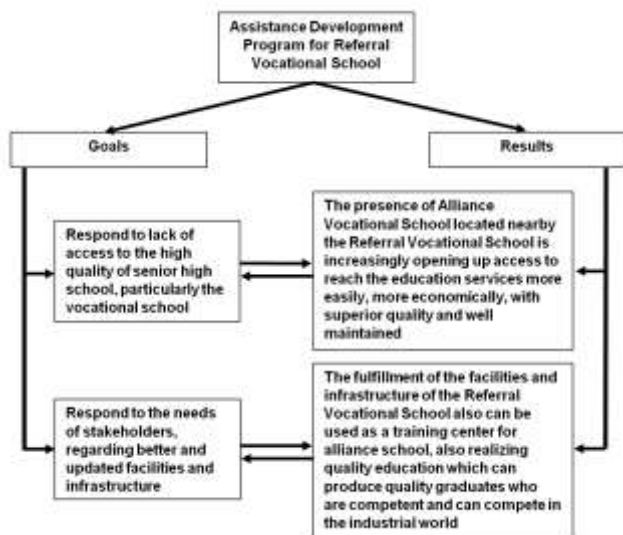


Fig. 5 Flows of the result of program

IV. CONCLUSION

A good program requires sustainability guarantees and this can be obtained from a structural and regulatory perspective. From a structural perspective, the existence of the Directorate of Vocational School Management is an important organ and have significant role in maintaining the sustainability of the program. From the regulatory side, regulatory support is required from a higher level unit, to ensure that all efforts and policies that will be issued in the future is in order to support and enhance this program to obtain better achievements and not otherwise.

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References

- [1] G. Mouzakitis, in Dmitry Rudenko, Elena Morosova, Prospects for the Development of Further Vocational Education in the Tyumen Region of Russia, *Procedia - Social and Behavioral Sciences* 214, (2015), pp. 694
- [2] SMK Negeri 1 Tuban, "SMK 1 Ditetapkan Sebagai SMK Rujukan di Tuban," <https://smkn1-tuban.sch.id/home/readmore/15/basket> (accessed in 8 April 2018)
- [3] SMK Negeri 1 Tuban, "SMK 1 Ditetapkan Sebagai SMK Rujukan di Tuban," <https://smkn1-tuban.sch.id/home/readmore/15/basket> (accessed in 8 April 2018)
- [4] Kementerian Pendidikan dan Kebudayaan, *Statistik Sekolah Menengah Kejuruan (SMK) 2015-2016*, (Jakarta: Sekretariat Jenderal, Pusat Data dan Statistik Pendidikan dan Kebudayaan, 2016), pp. 13
- [5] Papuakini.co, "231 Ribu Guru SMK Masuk Kategori 'Guru Adalah'" <https://www.papuakini.co/2017/09/04/231-ribu-guru-smk-masuk-kategori-guru-adalah/> (accessed in 8 April 2018)
- [6] Susenas 2013 as quoted in the *Rencana Strategis Direktorat Pembinaan SMK 2015-2019*, (Jakarta: Direktorat Jenderal Pendidikan Dasar dan Menengah Direktorat Pembinaan Sekolah Menengah Kejuruan, 2015), pp. 21
- [7] Shaidullina, Albina R. dan Ishmuradova, Alfiya M., The Implementation of the Cluster Approach in the Regional System of Vocational Education, *Review of European Studies*; Vol. 7, No. 4; Canadian Center of Science and Education, 2015,
- [8] Abby Riddell, Miguel Nin Zarazu. The effectiveness of foreign aid to education What can be learned? *International Journal of Educational Development* 48 (2016) 23–36.
- [9] Stephen P. Heyneman, Bommi Lee., International organizations and the future of education assistance. *International Journal of Educational Development* 48 (2016) 9–22.
- [10] Kassandra Birchler, Katharina Michaelowa., Making aid work for education in developing countries: An analysis of aid effectiveness for primary education coverage and quality. *International Journal of Educational Development* 48 (2016) 37–52.
- [11] Amilia Hasbullah, Wan Zahari Wan Yusoff, Maziah Ismail, Prima Vitasari. A framework study of school facilities performance in public primary school of Batubara district in Indonesia. *Procedia Social and Behavioral Sciences* 15 (2011) 3708–3712
- [12] Daniel L. Stufflebeam, George F. Madaus, Thomas Kellaghan, *Evaluation Models Viewpoints on Educational and Human Services Evaluation, Second Edition*, (Dordrecht: Kluwer Academic Publishers, 2002), pp. 280
- [13] Michael Quinn Patton, in Muriel J. Harris, *Evaluating Public and Community Health Programs*, (San Francisco: Jossey-Bass, 2010), pp. 7
- [14] Matthew B.Miles, A.Michael Huberman, Johnny Saldana, *Qualitative Data Analysis A Methods Sourcebook*, 3rd edition, (Washington DC: SAGE Publication, 2014), pp. 21–22.
- [15] Daniel L. Stufflebeam, "International Handbook of Educational Evaluation", by Springer *International Handbook of Educational Evaluation*. 2002.
- [16] Pynes, Joan E., *Human Resources Management for Public and Nonprofit Organizations: A Strategic Approach*, 3rd Edition, San Francisco: Josey Bass, 2009
- [17] FAO Corporate Document Repository, "Definition of Policy," <http://www.fao.org/wairdocs/ILRI/x5499E/x5499e03.htm#TopOfPage> (accessed in 11 April 2018)
- [18] Shao, Jingting, The Moderating Effect of Program Context on the Relationship between Program Managers' Leadership Competences and Program Success, *International Journal of Project Management* 36, 2018
- [19] Tilea Doina Maria, Vasile Bleotu, 5th World Conference on Educational Sciences - WCES 2013 Modern Trends in Higher Education Funding, *Procedia - Social and Behavioral Sciences* 116 (2014), pp. 2226
- [20] R.L. Gomez-Mejia, B.D. Balkin, L.R. Cardy, in Hatairai Jiarakorn, Siridej Suchiva, Shotika Pasipol, Development of Recruitment and Selection Process for Assistant Teachers using Multiple

Approaches. *Procedia - Social and Behavioral Sciences* 191 (2015), pp. 784

- [21] Sándor Gyula Nagy, Gergely Kováts, András Olivér Németh in Governance and Funding of Higher Education – International Trends and Best Practices, 5th World Conference Educational Sciences - WCES 2013, *Procedia - Social and Behavioral Sciences* 116 (2014), pp. 180
- [22] Leslie W. Rue, Lloyd L. Byars, *Supervision: Key Link to Productivity*, 10th Edition, (Singapore: MacGraw-Hill, 2010), pp. 3
- [23] M. Cemazar, G. Sersa, W. Frey, D. Miklavcic, J. Teissié, Recommendations and Requirements for Reporting on Applications of Electric Pulse Delivery for Electroporation of Biological Samples.

Journal homepage: www.elsevier.com/locate/bioelechem.
Bioelectrochemistry 122 (2018), pp. 69

- [24] Michael Porter, dalam Albina R. Shaidullina, The Implementation of the Cluster Approach in the Regional System of Vocational Education. *Review of European Studies*; Vol. 7, No. 4; 2015, (Canadian Center of Science and Education, 2015), h. 67
- [25] Albina R. Shaidullina, The Implementation of the Cluster Approach in the Regional System of Vocational Education. *Review of European Studies*; Vol. 7, No. 4; 2015, (Canadian Center of Science and Education, 2015), pp. 66