

Education Perspective in the Development of Vocational Education in North Sulawesi

Billy Morris Harold Kilis, Djubir Ruslan Eddy Kembuan, Martinus Maxi Mintjelungan, and Iszach Roy Perry Tarandung
Universitas Negeri Manado

Keywords: Education Perspective, Development, Vocational Education, Service Education

Abstract: Service education in the province of North Sulawesi, among others, the School of Nursing / Nursing gear (Ministry of Health), agricultural high schools, Secondary schools fishery, mining etc. Secondary school. The schools are managed directly by the Ministry / Department concerned, the foundation of the department and the department of education and culture. In the observations the author schools is included in the field of vocational and managed directly by the foundations and institutions and have not or do not have a direct relationship with the city manager or county vocational schools in the province. Results in the development of teachers often have to supply constraints. Vocational development and provision of teachers carried out independently, and there is no direct relationship with LPTKs or education office. Therefore, this study will create a pattern of relations in the service educational institution or vocational education floating in the North Sulawesi.

1 INTRODUCTION

The existence of various forms of service education provides consequences on the continuity of providing relevant teaching staff. Such conditions create new problems for LPTKs throughout Indonesia to provide various kinds of competencies that are very varied. On the other hand, the essence of national education is a mandate that contains a moral message as the basis for the implementation of education and a means of achieving the ideals of the struggle for national civilization. The process of achieving educational goals refers to several things including Law No. 20 of 2003 concerning the national education system and the 2012 director general of higher education law which describes the institutional structure of national education implementation. The development of vocational education in North Sulawesi is always based on needs and conditions that are relevant to the environment, culture and natural resources potential. Development of education must refer to UUSPN No. 20 of 2003 article 15 b concerning vocational education. As for HR issues, it is still placed on secondary factors, especially in supporting vocational education. On the other hand the main

problem in the development of vocational education is the availability of adequate human resources, relevant to the needs, in addition to facilities or supporting infrastructure. This problem is still a national problem or in most regions in Indonesia, which is still in the stage of reform. Of course various efforts are made to overcome this problem, in addition to the assistance of the central and regional governments; there must also be efforts by the education office, LPTK and all relevant stakeholders. Regional potential must be mobilized both available HR and existing facilities. The LPTK as a component that has competence in vocational development must be involved in planning to develop vocational education. On the other hand today there are several types of vocational education managed by the foundation or a ministry that is structurally not related to the existing education office or LPTK. There is no direct relationship, both in terms of providing human resources, cooperation in the form of partners and in its development.

Therefore the importance of the education relationship is in the form of partnerships with the local government, LPTK and local education offices. So far, official education or vocational school managed by the Foundation or a Ministry as if there was no relationship or cooperation in the

development of education even though both became important vocational education practitioners. The form of the relationship must be based on at least two main things, namely the provision of human resources, as well as the provision of facilities in addition to other mutually beneficial relationships such as: planning, collaboration in curriculum preparation, teacher exchange, joint training etc. The form of cooperation can be developed sustainably with a pattern of mutual benefits between the local government, LPTK and foundations or the existing vocational schools. Planning a vocational teacher education program according to Kemp (1994) must consider several things, namely: budget, facilities, materials, equipment, HR services and program planning schedules to development. Planning to develop the program, it must be done in synergy involving all stakeholders, let alone be done in an integrated / integrated manner and adapt to local conditions. From the opinion of supporting services, it can be ascertained that the budget is available; the facility utilizes all that is owned by the business world / world of industry and existing Vocational Schools. HR, utilizing all that is available in the existing Education and Vocational Office, of course by choosing according to the functions needed in an education program. The place or administrative centre can utilize the education office in the City District, which is certainly controlled by the LPTK as the executor. Other equipment can be done using a loan system, at all institutions that allow lending. To develop long-term and sustainable development programs, the LPTK must plan all aspects of support by including the LPTK (project list) and the regular education service budget. The problem in this study is how the relationship of official education / vocational school in the development of vocational education in North Sulawesi.

2 METHOD

Literature study was conducted to obtain a theoretical picture of various official education. While the survey was conducted to examine the real reality of official education in the province of North Sulawesi.

The method used in this study is literature study and survey of HR needs in several vocational schools in North Sulawesi. The development of vocational education requires at least a number of things other than funds, namely: facilities, materials, equipment, employee administration and the schedule from the planning stage to development. (Kemp, J. 1994). At the time of development after a

number of these things need to be reviewed several specific things including: teaching materials, development of assessment instruments, costs of consulting services, trial costs, time for instructor and staff training, coordination and supervision and administrative costs.

3 RESULTS AND DISCUSSION

Surveys in several Vocational Schools in North Sulawesi show several things, namely: the concept of establishing a vocational school, variations of study programs, and available teacher potential, teacher perceptions of required vocational human resources and their relevance. The potential of vocational education in North Sulawesi are: Fisheries, shipping, agriculture, shipping and automotive and mining technology. Besides the potential intended in the economic field, it cannot be ignored for development in services, such as tourism, trade and hospitality, accounting, health / nursing. Some of these potentials have been exploited by building several vocational schools, both by the government, foundations and ministries that are related to the intended potential.

Table 1: Number of vocational high schools in north Sulawesi.

No	District/ City	School		Amount
		Public	Private	
1	Kab. Kepl. Talaud	5	3	8
2	Kab. Kepl. Sangihe	5	1	6
3	Kab. Kepl. Sitaro	4	-	4
4	Kab. Minahasa	8	4	12
5	Kab. Minahasa Utara	1	3	4
6	Kab. Minahasa Selatan	5	2	7
7	Kab. Minahasa Tenggara	2	1	3
8	Kab. Bolaang Mongondow	3	9	12
9	Kab. BolMut	1	-	1

10	Kab. BolTim	1	2	3
11	Kab. BolSel	1	2	3
12	Kota Manado	5	27	32
13	Kota Bitung	4	7	11
14	Kota Tomohon	1	4	5
15	Kota Kotamobagu	1	5	6
	Province	47	70	117

From these data, the most vocational schools are in Manado City, both State 5 and private 27. Most are State Vocational Schools in Minahasa and Bolaang Mongondow, because there are districts with relatively large numbers of students. In the survey conducted the existence of vocational education is still partial and also not directly related to the LPTK, so that the availability of human resources and competency evaluation systems still do not meet the aspects of accountability as well as measurable competency guarantees. Vocational schools that are built are still short-term oriented, so that in the next few years will experience an HR crisis to meet needs. The role of government through the education office is still very limited, because in general vocational education is managed by the foundation independently. Each Vocational School also seems to have the authority in determining the guided study program, so that in the search of the author is very varied. In some findings there are several vocational schools that have technical tendencies, but principals come from vocational schools that are irrelevant such as accounting, on the contrary there are tourism vocational schools whose principals come from agricultural graduates. The condition in question certainly disrupts the development of education, as well as the quality produced.

In the context of the availability of human resources, it is still very limited, in addition to the unavailability of permanent teachers in most of the study programs; the average vocational school in the survey only has 1-2 teachers who are competent. The survey also found most principals who were not in accordance with vocational competencies so that in turn it would be difficult to develop schools both in terms of roles and quality in order to exist as a vocational school. The competencies that are also taught are very varied, making it difficult to provide facilities that can be used together. There are vocational schools in which there are accounting /

office competencies, then there is Information Technology, then there are also automotive and nursing techniques. Such variations will lead to greater facility costs, and less economical.

The concept of vocational education, from the aspects of education, training and development is explained as follows: Buckley and Caple (2004), in Kuswana (2013), states that education is a process and a series of activities that direct potential, individual opportunities to assimilate and develop knowledge skills and attitudes. Training is a systematic effort that is planned to modify or develop knowledge, skills and attitudes through learning experiences, to achieve effective performance in an activity (Kuswana 2013). Development is a general improvement of an individual's ability, skills through learning both consciously and unconsciously. (1978 department of employment). Vocational education has a characteristic so that on the management side it will show different characteristics of general education.

3.1 Management of Vocational and Vocational Technology Education.

Law Number 20 of 2003 concerning the national education system, article 15 states that the type of education includes general, vocational, academic, professional, vocational, religious and special education. Academic education, profession and vocational education are managed by the directorate general of higher education and in the explanation, among others: vocational education as secondary education to prepare students to work according to their fields. Professional education is higher education after undergraduate education and preparing students to have special skills requirements. Vocational education is a tertiary education that prepares students to have jobs with certain applied skills at a maximum equivalent to an undergraduate program. In this explanation means vocational education is not the same as undergraduate education or lower. Management of technology and vocational education includes broad problems, namely leadership issues, planning, organizing, supervision, HR management, performance management, student management, curriculum, counselling guidance, preventive care of facilities and infrastructure, integrated finance and quality in context and characteristics special. (Wibawa, B. 2017). Characteristics of vocational education in terms of management are very clearly seen in the planning including the preparation of facilities and infrastructure, providing relevant

human resources, managing funds. Complexity in management is often an obstacle in the development of vocational education, so it requires an effort and a strong desire from the local government.

3.2 Vocational Education in North Sulawesi

Vocational education includes vocational and vocational MA institutions, and vocational schools that hold community colleges (Kuswana 2013). Vocational education studies should also elaborate the education and training arrangements governed by RI law number 13 2003 concerning manpower which includes, among others, rights and recognition; independent work competency certification and BNSP. As the development of vocational education in North Sulawesi is increasing rapidly in line with the expansion of several city districts, the development of business, industry and services, as well as the transfer of high school to vocational high schools, changes and transfer of management from the foundation to the government specifically for schools -vocational schools. The direct consequence of the condition is: lack of teachers for all study programs, inadequate quality of graduates, lack of preparedness of teacher education which results in relatively inadequate quality of implementation and results. LPTKs cannot directly meet the relevant HR needs, due to various limitations both relevant human resources, infrastructure and fund facilities as carrying capacity. Besides that, it still needs a comprehensive study of all stakeholders of vocational education that involves not only the government, and the business world but the entire education community. LPTKs need to be mediators / facilitators in planning and implementing the process until the evaluation or assessment of the program.

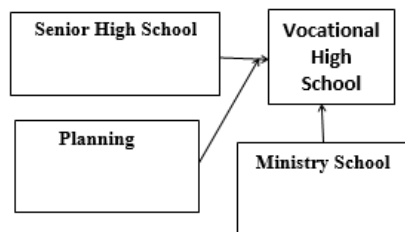


Figure 1: Vocational education in North Sulawesi.

Vocational schools in North Sulawesi consist of schools that change from general high schools, and schools that are held through planning. In addition

there are several official schools in which there is vocational education, which is managed directly by the ministry's institutions through the educational institutions they own.

3.3 The Concept of Partnership between Institutions

The potential of a number of institutions engaged in education, needs to be driven through a partnership concept. The concept of partnership is one solution to overcome the availability of human resources, especially from the aspect of facility fulfilment. Administration activities, practicum etc. These activities should involve all institutions that have educational facilities, no exception, specifically but up to those who have only practical facilities. Of course, hotels, airports, Telkom, PLN, hospitals, clinics and so on need to be involved in developing vocational education. Such institutions are institutions that manage special education, or those that have facilities that are appropriate to educational needs or those that are not related and manage education. Partnerships between institutions, of course, are intended to utilize facilities in certain institutions that are available for practical equipment. In addition to institutional partnership facilities can also be an effort to collaborate and exchange information and competencies owned by each institution. The partnership concept is shown in Figure 2.

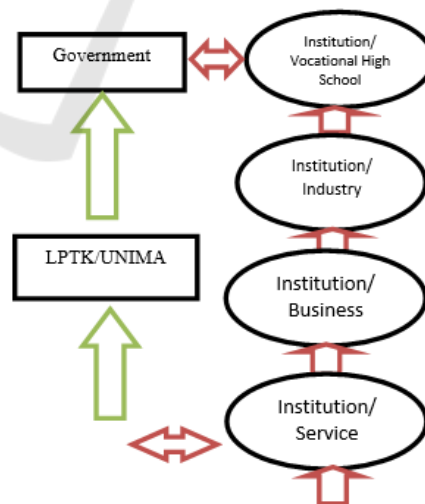


Figure 2: Reciprocal Relations between the government, LPTK and partnership institutions (SMK, industry and business world).

3.4 Decentralization of Education

Conceptually there are two types of educational decentralization, namely the first decentralization of authority in terms of policies and funding aspects from the central government to the second area of decentralization of authority by granting greater authority to schools (Wibawa, B. 2017). Decentralization of education will include a process of granting wider and greater authority and funds to the central government to regional governments that are simultaneously provided at the education unit level. In the development of vocational education decentralization is important to be carried out in line with regional autonomy. Burki et al 1999 in Wibawa, B (2017) has examined several aspects and authorities when education can be decentralized.

Table 2: Typology of decentralized education authority.

No	Aspect	Authority
1	Organization and PBM	Determine the school that students can follow Study time at school Determination of the book used Learning methods
2	Teacher management	Choose and dismiss the principal Choose and dismiss the teacher Determine teacher salary Give responsibility to the teacher Conduct training for teachers
3	Planning Structure	Open / close school Determine the program Definition of content of learning material Supervision of school performance
4	Resource	School development Budget allocation for teachers / staff Budget for teacher training

In Table 2 some authority has been applied even though it is still within certain limits, as in no. 1 and 2. But for salaries and budget allocations, there are still obstacles to the rules and laws. The improvement of decentralization was indeed carried out with the Local Government Law No. 23 of 2014, concerning the division of regions which had an effect on the development of education in the newly created regions.

3.5 Service Education Relationship in Vocational Development

The development of vocational education in the regions still faces various obstacles, including: availability of facilities and infrastructure, availability of teachers relevant to the competence and ability of the LPTK to plan until development. In addition to these matters, the availability of funds and government support is still a problem that needs to be examined to find a solution. A simple and relatively short solution to overcome some of these problems is to build partnerships with several existing official education, so that the need for facilities and human resources can be fulfilled. Practicums can utilize the facilities available in areas or areas that are easily accessible. The next effort of the collaboration is to jointly prepare the teacher for the long term, maintenance of equipment must get the support of government funds through the district education office. The official education relationship must be accommodated by the government and the LPTK, so that in the implementation of vocational development in addition to obtaining direct support from the official education in question, it also benefits the institution. The joint solution must be compiled and binding for a certain period of time. It is known that vocational development is very varied, so that LPTKs cannot meet teacher needs quickly and in accordance with their competence. LPTKs at least only prepare one or several competencies, namely: didactic method (pedagogic), social and personality. LPTKs can also develop curricula that are appropriate to the needs and conditions that exist in schools. Curriculum development must involve all parties including from the school in question (stakeholder). Professional competence is obtained from the teacher / instructor and the practices that are owned by existing service schools. The function of the school is in addition to human resources and facilities, as well as administrative management, finance including staff management.

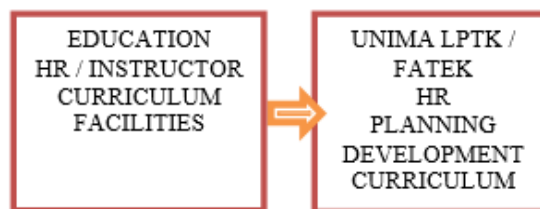


Figure 3: Relations of service education and LPTK for development in vocational fields.

All official schools have adequate teachers / instructors and facilities including curriculum and management, administrative staff. Service schools are built because of the availability of instructors, facilities, and infrastructures are oriented to the ministry's tasks and functions where there is activity. The role of the LPTK is in methodical or pedagogic didactic training, the development of vocational curriculum and can be applied according to the needs of local conditions by involving both in planning and evaluation.

4 CONCLUSIONS

Changes in the education paradigm and with the increase of autonomous regions provide opportunities for several vocational schools to be built according to the needs of the area in question. Vocational education in North Sulawesi has rapidly developed indications of community academies located in the city of Bitung, which is specifically oriented towards the logistics sector, showing the government's attention to the development of education. Therefore vocational education needs to be supported by the provincial government through the government in each city and district by allocating a special budget. Service education in North Sulawesi is still limited, so to become a center for vocational development, there are still obstacles. In addition, the existence of vocational schools and official education is still based in Manado and Bitung.

Partnerships between institutions need to be improved as well as models of mutually beneficial relationships in the form of mutualism symbiosis. Service education needs to give other parties the opportunity, to utilize available facilities in the context of developing vocational education. On the contrary, Unima through the faculty of engineering provided methodical didactic training and curriculum development.

There needs to be cooperation in the form of partnerships with LPTK, along with all stakeholders both in terms of planning, development and evaluation.

ACKNOWLEDGEMENTS

The authors would like appreciate to Rector of Universitas Negeri Manado which has given financial in this research by fund PNBPN.

REFERENCES

- Kuswana, W.S., 2013. *Dasar-dasar Pendidikan Vokasi dan Kejuruan*, Alfabeta. Bandung.
- Buckley, R and Jim, C., 2004. *The Theory & Practice of Training*. Kogan Page; Revised Edition.
- Helmut, N., 1989. *Pendidikan Kejuruan*, Gramedia. Jakarta.
- Kemp, J., 1994. *Perancangan Pengajaran*, ITB. Bandung.
- Wibawa, B., 2017. *Manajemen Pendidikan Teknologi Kejuruan dan Vokasi*, Bumi Aksara. Jakarta