

School Readiness For Implementing Vocational Education Revitalization

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Abstract: This research assesses readiness of schools in implementing vocational education revitalization. Subjects of the research are 22 state vocational high schools in West Sumatera Indonesia chosen using purposive sampling. Qualitative methods are employed to collect data for the research using observation, interview, and documentation. The results shows that levels of readiness of vocational schools in West Sumatera to implement the revitalization program in three aspects are generally moderate. The value of management of cultural development is 72%, for the leadership conditions of change is 86% and for the aspect of an intervention strategy in managing teaching resources and education staff is 83%. It implies that further efforts should be conducted to ensure that state vocational high schools are ready to educational revitalization.

Index Terms: education revitalization, leadership of change, school culture development, school readiness, state vocational high schools, vocational education, West Sumatera.

1 Introduction

VOCATIONAL education plays an important role in developing the competitive advantage of a nation as the demand for skilled workers in the ASEAN region is estimated to increase by about 14 million people (41%), within 2010 to 2025. Furthermore, Indonesia needs about 4.4 million skilled workers [1] and vocational education is oriented towards the preparation of skilled workforce, which is expected to be a motivation for strengthening the local and national economy, including the formal and informal sectors. In accordance with *Law 20/2003 on National Education System Article 15*, vocational senior high schools (*sekolah menengah kejuruan* abbreviated SMK) are created to prepare human resources for work in certain fields, either independently or in collaboration with certain industrial sectors. These educational institutes are required to be capable of producing proficient manpower, in accordance with the expectations of schools, communities and the business/industrial world, with work competencies in accordance with their fields, adaptability and highly competitive [2],[3]. Data from Statistics Indonesia (*Badan Pusat Statistik* abbreviated BPS) shows that within 2010 to 2015 the level of employment of high school graduates (90.74%) was higher than vocational school graduates (89.19%) and the number of open unemployment rates reached 7.24 million people. Furthermore, based on educational status, graduates of vocational schools are the most unemployed as the number reached 813,776 people (11.24) of the total unemployment population [4]. This is further due to the low proficiency of graduates, incompatibility of competencies taught in schools with the needs of business/industry and the lack of mental readiness to work [5]. The labor market requires workers who are able to think logically and vocational high schools provide the skills required over time, however, they have failed to overcome the problem of unemployment in Indonesia [6]. Schools are generally slow to respond to changes because of their rigidity. Furthermore, this internal problem is caused by the culture developed in schools, which serves as a big resistance for them to transit

and evolve, further exacerbated by the conventional leadership practiced by principals. Nevertheless, schools try to make changes, which tend to be forced and not carefully planned, measurable or sustainable [7]. The President has issued *Presidential Instruction Number 9 of 2016, concerning Revitalization of Vocational Schools* on 19 December 2016, in the conquest to improve the quality and competitiveness of Indonesia human resources, as the direction for future development of vocational education. The instruction further stated that the Ministry of Education and Culture has the task of: (1) making a map of the development of vocational school, (2) perfecting and harmonizing its curriculum, with reference to competencies that are in line with the needs of the labor market (link and match), (3) increasing the number and competence of the institutions' educators and staff, (4) enhance cooperation with ministries/institutions, regional governments and the business/industrial world, (5) institution accreditation and increasing access as well as the certification of graduates, (6) establishing a Working Group on Vocational School Development (*Kelompok Kerja Pengembangan SMK*) [8]. In order to assist in the successful implementation of the presidential instructions, vocational schools need to fix their internal problems especially systems and humans, must be prepared to implement changes, in the context of development. Furthermore this transition is closely related to leadership as they cannot occur if the managers are not able to influence their subordinates to move from the current situation to the expected [9].

Revitalizing vocational school modifies the absorbed paradigm of vocational school graduates, from "supply-driven" to "demand-driven", indicating their relent to provide quality human resource, however the labor market bid hard to obtain human resource from vocational school. Furthermore, in the context of achieving organizational development, culture is the main thing that must be changed along with leadership and culture and other factors to be considered in developing organizations [10],[11],[12]. This research therefore was intended to analyze the level of readiness of vocational schools in West Sumatera to implement revitalization of vocational education. Furthermore, it was also directed at developing a model of Organizational Development in vocational school.

2 RESEARCH METHODOLOGY

This research was initiated with the conduction of qualitative research on phenomena, social activities, behaviors, hopes

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and thoughts of everyone in the school (individually and in groups), utilizing the technique of collecting data directly from people in their natural environment (in this case the school environment). Furthermore, to enrich data obtained, quantitative research was also carried out, by distributing questionnaires to several vocational schools. Quantitative data (carried out to obtain information related to development) and qualitative data (conducted to obtain more specific information) from Padang 9 State Vocational School were used in this study. The quantitative data collection used questionnaires with a modified scale, to obtain more details, by involving closed questions, which provides answers that can be chosen by respondents. The four choices include the one with the indicator of achievement, at a percentage of (1) 0-25, (2) 26-50, (3) 51-75, (4) 76- 100, and the "NO" answers with a score of zero (0). Before the instruments were distributed, a trial was conducted on 32 respondents outside the study sample, however they were a part of the population, intended to determine the validity and reliability of instruments. Qualitative data collection was carried out through observation, interview, and documentation. Observation is conducted to examine attitudes, behaviors and spontaneous habits, exhibited by all school members (principals, teachers, students, employees), through social activities while performing their duties and functions. The participant observation were unstructured, however, the researcher remained the main instrument, by directly observing the object under study, utilizing guidelines and field notes. In interview, two-way communication was conducted with informants, related to the problem being investigated, which was therefore carried out to complete the data obtained through observation. This technique utilized structured interview, where the researcher determines the problem and the questions asked, to obtain answers to the hypothesis, thus the respondent has the same opportunity to answer those questions. The data collection tools involved in this phase include guides and tape recorder. Documentation uses various official or formal records and expressive documents, related to organizational development were studied. Data collection was conducted at vocational schools throughout West Sumatra. Sample determination involved area sampling technique, while determining the school used as a sample involved purposive random sampling technique and its distribution can be seen in the table below: Quantitative data collection was carried out at schools, randomly assigned as samples. Furthermore, this procedure was conducted in Padang 9 State Vocational High School and informants were selected from related elements, assessed to be capable of providing the data and information needed to develop a model for developing the institution. The selection process involved Snowball sampling and the 126 respondents include the principal, vice principal, head of the study program, teachers, supervisors and students. Qualitative data analysis however followed the stages of descriptive analysis technique including data collection, reduction and presentation, as well as drawing conclusions [13, p. 20]. Information collection is a search activity, conducted through observation, interviews and documentation studies, obtained from informants and research locations. Data reduction is an analytical activity that aims to reinforce important things, identify and dispose unnecessary data, and systematically compile data, in order to conclude correctly. Furthermore, data presentation was applied to provide a comprehensive picture of a set of data, through matrices, diagrams, activity descriptions, etc. Drawing

conclusions is the last step, which involves the creation of a general picture representing all information on the subject of research.

3 RESEARCH RESULTS

Data related to the level of readiness of vocational schools, in West Sumatra Province to implement revitalization of their education, consists of three aspects, which include (a) managing the development of school culture, (b) leadership of change and (c) intervention strategies to implement revitalization of vocational education. Furthermore, each of these presents the average value and frequency distribution, which indicates the level of respondent's achievement.

3.1 Management of School Culture Development

To identify the distribution of respondents' answers in the aspect of school culture development management, each indicator is illustrated in the following table:

Table 1
The scores of the aspect of Management of School Culture Development

Indicators	Means	Respondent Achievement Rates (%)	Descriptions
Planning	32,9	82%	Good
Implementation	50	60%	Moderate
Monitoring	20,7	74%	Moderate

Source: Primary data.

The highest indicator of the informants' achievement level, based on the table above, was planning, at 82%, which was generally in the good category. Furthermore, some schools conducted planning activities, by (1) forming a school culture development team and determining their direction, (2) identifying the fundamental values to be developed, (3) involving the business/industry in deciding these fundamental values, (4) establishing a selection criteria for new admissions, based on analysis of competency requirements in the field of expertise, (5) conducting an assesment on the external and internal environment, to obtain an overview of the factors that influence the development of school culture, etc. Meanwhile, for the implementation indicator, the respondent's achievement rate was 60%, therefore it was included in the moderate category and considered lower than the other two indicators. This stage further actualized, (1) socializing the values, developed in the school culture and all school members, (2) increasing the role and function of counseling guidance (*bimbingan konseling* abbreviated BK) in supervising students to understand and accept the values, (3) practicing coordination with unit counseling guidance in the preparation of environmental outreach programs and work values for students, (4) providing job information to students, through a special job fair (*bursa kerja khusus* abbreviated BKK) unit, (5) consistently implementing discipline, with a system of reward and punishment, (6) checking the relevance of values chosen by the teacher in the lesson plan to be integrated in the learning process, (7) coordinating with teachers on the integration in education, (8) implementing training of factory based learning, (9) inviting guest teachers from the business world/industry, in order to socialize the value and the industrial work environment of students, (10) developing entrepreneurship units, (11) forming productive student activity groups, (12) implementing work competency practices for

students as a process of product realization in teaching factories, (13) conducting extracurricular activities that supports competency skills, (14) putting up slogans that represent the direction of the school views and (15) carrying out activities that reveal and strengthen the basic virtue held by the institution as a routine activity. For the monitoring indicator, the level of achievement of the respondents was 74% and therefore, it was included in the moderate category. The activities carried out at this stage include, (1) ensuring the process of implementing school culture activities are in accordance with the plan, (2) developing monitoring and evaluation instruments for the program, (3) detecting obstacles and weaknesses in its implementation, (4) measuring its success, (5) revising towards its weaknesses, compiling a strengthening program towards values that have begun to be entrenched and finally, guaranteeing the consistency and continuity. From the analysis of the aspects of management of school culture development, one respondent was in the 37-49 class interval, three were within 50-62, fifteen were within 76-88, twenty five respondents were within the class interval 89-101, fifty-two were within 102-114, twenty nine were in the 115-127 class interval and one informant was within 128-140. The following table that contains the frequency distribution of the management aspects of the development of school culture.

Table 2
Frequency Distribution on the Aspect of "Management of School Culture Development"

Class interval	Frequency
37-49	1
50-62	3
63-75	0
76-88	15
89-101	25
102-114	52
115-127	29
128-140	1

Source: Primary data.

In total, the level of management of vocational school culture development in West Sumatra was 72%, therefore, in the moderate category with an average value of 186, 58.

3.2 Leadership of Change

To disclose the distribution of respondents' answers, on the aspect of "leadership of change" and each indicator can be seen in the following table:

Table 3
Scores on aspect of Leadership of Change

Indicator	Mean	Respondent Achievement Rates (%)	Description
Initiation	25,8	92%	Very good
Implementation of change	49,4	82%	Good
Institutionalization	17,5	87%	Good

Source: Primary data.

Based on data on table above, the highest indicator of the respondent's achievement level was "initiation", at 92%, thus, it is included in the excellent category. Implementations carried out on this aspect, include, (1) providing views on school programs and policies, (2) availing support to subordinates in effecting changes, (3) transitioning the paradigm of thinking of aides in implementing existing programs and policies, (4) approaching dependents to follow school programs and policies, (5) becoming their role model and providing motivation to follow programs and policies. Conversely, for the implementation indicator, the respondent's level of achievement was 82%, hence it was included in the good category. This stage involved (1) forming several work teams to implement established programs and policies, (2) collaborating in this process, (3) communicating predetermined memoranda, (4) utilizing various media to communicate the schedule, (5) building links with the business/industry by taking certain approaches, (6) supporting productive teachers involved in dual skills programs (*program keahlian ganda* abbreviated PKG), (7) empowering subordinates to improve school quality, (8) motivating dependents to follow plans, (9) play an active role in building cooperation, with the business world and related industries, (10) approving established school programs and policies and (11) using certain approaches in implementing established school programs / policies. For the institutionalization indicator however, the level of achievement of the respondents was 87% and thus included in the good category. Some of the activities carried out at this stage involved (1) giving appreciation to subordinates who have successfully implemented predetermined school programs/policies, (2) fostering positive relations with dependents, (3) planning and holding sharing activities, to build an atmosphere of togetherness in school, (4) eliminating rigidity in work attitude, and (5) conveying change through effective communication. From the analysis of leadership as shown in table below, with respects of change, three respondents were in the 60-65 class interval, two were within 66-71, six informants were within 72-77, ten were within 78-83, seventeen respondents were within the class interval of 84-89, thirty were within 90-95, thirty-two were in the 96-101 class interval and twenty-six were within 102-108. Table 9 further contains the frequency distribution, based on the aspect of "leadership of change".

Table 4
Frequency distribution on the aspect of Leadership of change

Class interval	Frequency
60-65	3
66-71	2
72-77	6
78-83	10
84-89	17
90-95	30
96-101	32
102-108	26

Source: Primary data.

Overall, the level of achievement of the leadership aspect of change in vocational schools in West Sumatra was 86% and thus considered in a good category, with an average of 168.

3.3 Intervention Strategy

To determine the distribution of answers obtained on the intervention strategy aspect of managing the educator resources and staff, each indicator can be presented in the following table:

Table 5

Scores on Aspect of "Intervention Strategies" in Management of Educator Resource and Education Staff

Indicator	Mean	Respondent Achievement Rates (%)	Description
Work management	51.3	86%	Good
Competency Enhancement	38.3	80%	Good
Award System	10.2	85%	Good

Source: Primary data.

Based on the table above, the highest indicator of the level of achievement in this category, was observed in performance management at 86%, generally indicating that the percentage of respondents' achievement level, was in the good category. The characteristics portrayed by stake holders in this aspect, include, (1) developing a school revitalization work program with a specific target and time period, (2) socializing the program for teachers and education staff, (3) involving the responsible disposition of several instructors, (4) analyzing their readiness to implement the program, (5) establishing rules for work discipline, (6) requiring them to implement project-based learning in productive subjects, (7) involving productive teachers in the development of TEFA, (8) requiring them to be innovative in teaching and learning, (8) setting a target of increasing the number of memorandum of understanding with businesses and industries in each program of expertise, (9) involving teachers in strengthening the governance of student industrial work practices, (10) recruiting and certifying educators from the labor market sector as instructors, (11) modifying the purpose for increasing the competence of teachers and school education staff, who have been given training, (12) conforming to for the objectives of achieving student learning outcomes in each subject, (13) restructuring the school organization within a certain period, (14) designing a system for evaluating the performance of teachers and staff, (15) periodically assessing their achievements. Furthermore, for the indicator of "increasing competence", the level of achievement for the respondents was 80%, therefore it was included in the good category. Improving were observed in (1) organizing teachers competency development programs, (2) implementing training to improve their skills and abilities, enforcing training, to improve their proficiency, independently, (3) carrying out technical guidance on *XXI Century Learning Development* for tutors, (4) implementing technical guidance on improving their Information Technology skills, (5) actualizing literacy and capacity building training of education staff in schools, (6) implementing entrepreneurship development programs, (7) empowering qualified teachers as instructors in Dual Skills Programs (PKG), (8) facilitating the implementation of the Dual Skills Programs (PKG), (9) cooperating with business/industry related to improve competency of the instructors, (10) scheduling training and education staff with business/industry, and (11) encouraging them to be active in community activities such as consortium of subject teacher (*musyawarah guru mata pelajaran* abbreviated MGMP). Based on reward system

indicator, the respondent's achievement rate was 85% and thus included in the good category. The following were some of the activities carried out at this stage: (1) leaders appreciated the teachers and education staff, who performed greatly, (2) they also provided career development in schools for teachers and education staff, who have good conduct, (3) school administration attributed more trust to them to run school work programs. The results of the aspect analysis of intervention strategies in education staff resource management, indicated that one respondent was in the 55-62 class interval, four informants were within 63-70, three were within 71-78, twelve were within 79-86, sixteen were in the interval class of 87-94, thirty-three were within 95-102, twenty-six respondents were within 103-110, twenty-seven were in 111 class intervals -119, and four were within 120-127. The table below lists the frequency distribution of the "intervention strategy" aspect in educator resource and staff management.

Table 6

Frequency Distribution on the aspect of Intervention Strategy in Management of Educator Resource and Education staff

Class Interval	Frequency
55-62	1
63-70	4
71-78	3
79-86	12
87-94	16
95-102	33
103-110	26
111-119	27
120-127	4

Source: Primary data.

The comprehensive level of achievement of the intervention strategy in educator resource and staff management in vocational schools in West Sumatra was 83% and thus in a good category, with an average of 189.

4 CONCLUSION

The level of readiness of vocational schools in West Sumatra, through the assessment of the level of which revitalization has been implemented, was in a good category, further indicating that the institution is ready to conduct the program, however, possessing some weaknesses in the implementation. This good category was however for the initial stage only, hence the need for a collaboration between all internal parties, especially principals, vice principals, heads of study programs, chairs of special job fair and TEFA Leaders, in order to activate production units. The levels of readiness of vocational schools in West Sumatra to implement the revitalization program in every aspect includes, (1) management of cultural development (72%), (2) the leadership conditions of change was 86% and (3) the aspect of an intervention strategy in managing teaching resources and education staff was 83%. The lowest aspect is in the management stage of cultural development.

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