PAPER NAME

PROSIDING 4.pdf

WORD COUNT

3283 Words

CHARACTER COUNT

17888 Characters

PAGE COUNT

5 Pages

FILE SIZE

361.1KB

SUBMISSION DATE

Jun 22, 2023 4:48 PM GMT+8

REPORT DATE

Jun 22, 2023 4:48 PM GMT+8

● **9% Overall Similarity**

The combined total of all matches, including overlapping sources, for each database.

- 3% Publications database
- Crossref Posted Content database
- Crossref database
- 9% Submitted Works database

● **Excluded from Similarity Report**

- Internet database
- Quoted material
- Small Matches (Less then 10 words)
- Bibliographic material
- Cited material
- Manually excluded text blocks

Study of Availability of Productive Subjects' Teaching Materials in Vocational High Schools in South Sulawesi

Iwan Suhardi[1,*] Riana Tangkin Mangesa[1]

[1]*Faculty of Engineering, Universitas Negeri Makassar, South Sulawesi, Indonesia*
Corresponding author. Email: iwan.suhardi@unm.ac.id

ABSTRACT

One of the main obstacles to the vocational high school revitalization process is the unavailability of teaching materials that can be used for teaching and learning activities. The availability and quality of productive subject teaching materials depend heavily on efforts conducted by the school and the supporting teachers of the subjects. In connection with aligning graduate competencies with the development of the world of work, it cannot be separated from the knowledge and skills of vocational students that they can obtain through learning in productive subjects. Until now, the government has not been able to provide teaching materials either in the form of textbooks or modules for teachers and students. Therefore, a study on the availability of teaching materials for productive subject groups in vocational high schools based on the 2013 Curriculum which has been implemented in most of schools in Indonesia, especially in South Sulawesi, is highly needed. This type of research is evaluative research in the form of ex-post-facto. The results of the study concluded that the availability of productive teaching material in Vocational Schools in South Sulawesi Province was still lacking. Another obstacle is the amount of productive subject teaching material is not proportional to the number of students. Furthermore, the learning process is also constrained by the lack of teaching aids or training tools in the form of trainers and practicum that are in line with the world of work development's needs. The factors that become obstacles cause the productive learning process in the school in South Sulawesi to be not optimal and can impact on the unpreparedness of its graduates to enter the workforce.

Keywords: Productive subjects, teaching materials, vocational high schools

1. INTRODUCTION

The Central Statistics Agency (BPS) of South Sulawesi [1] released a report in August 2017 stated that the level of unemployment in the province of South Sulawesi reached 213,695 people. The highest unemployment rate is found in the Vocational High School education level, which is 11.92%. It means that the world of work does not absorb around 25,500 vocational school graduates. This figure is ironic because the graduates are the people who are specially educated to be ready to work. This fact shows that vocational education students are prepared to be trained, skilled, and work-ready workforce, have not been able to function optimally.

The revitalization process of vocational high schools as mandated by Presidential Instruction Number 9 of 2016 in the field is still constrained by several things, including the lack of numbers and competencies for the teachers and education staff as well as the lack of evenly available quality teaching materials. To overcome these, the government have been tried to open up recruitment of teaching staff to become civil servants every year, increasing teacher capacity, and increasing the quality of graduates in tertiary institutions. The lack of availability of teaching materials has been endeavored by the preparation of quality books in the form of electronic books (e-books) both for teachers and students, which can be downloaded from the internet for free.

The main obstacle to the revitalization process felt by productive subject teachers is the unavailability of teaching materials that can be used for teaching and learning activities. Until now, the government has not been able to prepare teaching materials either in the form of handbooks or modules for productive subjects, both for teachers and students. Because it is not available, textbooks or modules for productive subjects are managed by the teachers who supporting these subjects by compiling their productive material. The availability and quality of productive subject teaching materials are

very dependent on the effort from the school and the supporting teachers of the subjects concerned.

Productive subjects are learning given to students who following the chosen expertise program. Therefore, productive subject teaching materials include the study of vocational knowledge and practical skills tailored to the expertise program selected by students during their time at the vocational level.

There are many types of productive teaching materials which should be adapted to the subjects and must be updated according to the development and needs of the workforce. They needs to be updated to adjust the development and needs of the world of work. In his research, Chryssolouris et.al [2] concluded that there was a lack of relevance between productive subject competencies and the world of work in the implementation of industrial work. The same thing was also found by Dubin [3], who observed the human relation in industrial society. Estriyanto et al [4] also concludes the lack of relevance between the competence of productive subjects and the work environment in the implementation of industrial work in the schools that they study.

According to the 2013 Curriculum [5], there are currently three subject groups covering national content subject groups (A), regional content subjects (B), Basic Field of Expertise (C1), Basic Expertise Program (C2), and Expertise Competency (C3). At present, the number of subjects in the expertise competency group reaches 146 expert competencies [5]. Although the curriculum no longer uses normative, adaptive, and productive subject groups, in the field, the term productive subjects refer to groups of subjects C1, C2, and C3. Seeing that there are many competency skills at the Vocational School level, the amount of teaching material that must be prepared by productive subject teachers is greatly adjusted by the number of productive subjects. Therefore, the study of the availability of 2013 curriculum-based teaching materials for productive subject groups in vocational high schools, especially in Sulawesi South, is essential.

2. RESEARCH METHODS

This type of research is evaluative research in the form of ex-post-facto. The used research model refers to the CIPP evaluation model proposed by Stufflebeam [6] and is expanded by adding the Outcomes (O) component to become the CIPPO model. The use of the CIPPO evaluation model can provide a detailed and comprehensive picture of the program's success. CIPP is an evaluation model with targets in the form of (1) Context evaluation, (2) Input evaluation, (3) Process evaluation, and (4) Product evaluation results). The four words mentioned in the abbreviation CIPP are the targets of evaluation, which are components of the process of program activities. The CIPP evaluation model has five

components including context (context), input (input), process (process), results (product), and impact / output (outcomes).

In this study, the population was all vocational high schools in the South Sulawesi region. Sampling is done by stratified random sampling technique. The research data collection was carried out by direct observation. Data were collected by observation, documentation, interviews, checklist, and Forum Group Discussion with the principal's partner. Data collected is evaluated data that is used to make decisions to explain the study of the availability of productive subject teaching materials.

3. RESULTS AND DISCUSSION

The research data covers eight districts/cities in South Sulawesi Province, namely Sinjai, Makassar, Soppeng, Bone, Bulukumba, Tana Toraja, Pare-Pare, and Sidrap. The number of productive subject teachers sampled was 92 people from 46 study programs.

From observations and interviews with the head of study programs and the subject teachers, it is known that almost all productive subject teachers already have teaching materials. There is only 1 (one) productive teacher who is unable to show the teaching materials that he has. Therefore, the availability of teaching materials reaches 98.9%. The availability of teaching materials, which is almost 100%, is a natural thing. That is because the demands of the teaching administration process that all teachers, including productive subject teachers, are required to prepare a Comprehensive Learning Implementation Plan (RPP) in preparation for the learning process.

Based on the form of teaching materials, it was found that many teachers have more than one type of teaching material. The form of teaching materials obtained when collecting productive subject teacher respondent data can be summarized in Figure 1 below.
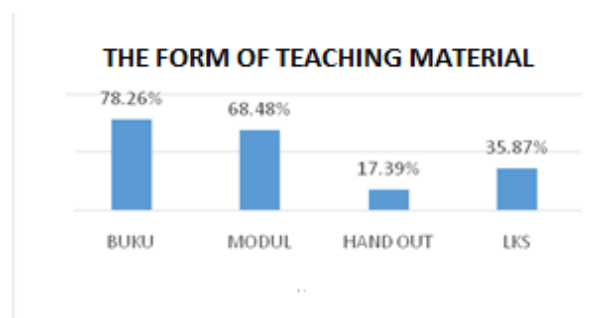
Figure 1 Forms of Productive Subjects Teaching Materials

Next is the identification of productive subject learning materials, including aspects of general information, the content of teaching materials, details of time, evaluation of learning outcomes, and use of

language. Identification of this teaching material is made by assessing the productive lesson teacher lesson plan used to prepare the teaching and learning process presented in Table 1.

Table 1. Identification of Teaching Material

No	Productive Subjects Teaching Materials	Average	Grade
	General Information		
1	The contents of teaching materials are in accordance with competency standards	3.50	Good
2	The contents of teaching materials are in compliance with essential competencies	3.45	Good
3	Learning objectives are formulated according to essential competencies	3.41	Good
4	Completeness of teaching materials, in accordance with learning objectives	3.37	Good
5	The description of basic skills is stated in accordance with the achievement of the indicators	3.19	Good
6	The translation of indicators explicitly includes cognitive aspects	3.19	Good
7	The translation of indicators explicitly includes the affective aspects	3.21	Good
8	The indicator description explicitly includes the psychomotor aspects	3.30	Good
9	The suitability of the indicator formulation with the time provided	3.10	Good
10	Maps/charts that illustrate the scope of material to be discussed in teaching materials are presented in a complete and precise manner	3.05	Good
11	Glossary	2.95	Good
12	Learning resources/references/enrichment/references that support the intended learning material.	3.10	Good
13	All subject matter from one competency unit or sub-competency studied is contained in one teaching material in its entirety.	3.11	Good
14	Developed teaching materials do not depend on other teaching materials or do not have to be used together with other teaching materials.	3.00	Good
15	Teaching materials have a high adaptive power to the development of science and technology	3.23	Good
Average evaluation of aspects of general information on teaching materials		**3.21**	**Good**
	Content of Teaching Material		
1	Clarity of indicator formulation	3.35	Good
2	Systematic preparation of learning plans	3.39	Good
3	Compatibility of learning material with indicators	3.34	Good
4	The suitability of the indicator with the planned time	3.15	Good
5	Suitability of student activities with learning methods	3.14	Good
6	Suitability of student activities with learning methods	3.13	Good
7	Clarity of teacher and student activities at each stage of learning	3.23	Good
8	Use strategies to motivate student learning	3.26	Good
9	Provide the motivation to learn at the end of each learning	3.34	Good
Average evaluation of a content aspect of the Learning Plan of Teaching Material		**3.26**	**Good**
	Time Details		
1	Appropriate time allocation used	3.23	Good
2	Details of time for each stage of learning	3.17	Good
Average evaluation of time details of teaching material		**3.20**	**Good**
	Evaluation of Learning Outcomes		
1	The tasks given are adjusted to the indicators for achieving competency goals	3.24	Good

No	Productive Subjects Teaching Materials	Average	Grade
2	Assessment of cognitive aspects is clearly stated as a unit of competency assessment (performance)	3.22	Good
3	Evaluation of affective aspects is clearly stated as a unit of competency assessment (performance)	3.15	Good
4	Assessment of psychomotor aspects is clearly stated as a unit of competency assessment (performance)	3.20	Good
5	The clarity in working instructions for practice/test questions	3.28	Good
6	The problem sets are presented in accordance with the order in which they are presented	3.16	Good
7	The level of difficulty of the questions/tests varies according to students' abilities	2.98	Fairly Good
8	Balance the proportion of practice/test questions with the contents of the material	3.04	Good
Average evaluation of learning outcome of teaching materials		**3.16**	**Good**
Language Usage			
1	Use language according to Indonesian rules	3.26	Good
2	Not SARAPPPK (Ethnic / Religion / Race / Intergroup / Pornography / Politics / Propaganda / Violence)	3.25	Good
3	Teaching material does not use local language	3.20	Good
4	The language used is communicative	3.25	Good
5	The simplicity of sentence structure	3.13	Good
6	There is consistency in the presentation in terms of font selection, icon, font size, line spacing, and layout of teaching material	3.13	Good
Average assessment of aspects of language use of teaching materials		**3.20**	**Good**
Average Rating of All Aspects of Teaching Materials		**3.21**	**Good**

From Table 1 above, it can be concluded that the assessment for the identification of teaching materials, in general, can be categorized as useful. The next assessment is the feasibility of productive subject learning materials used for the learning process (Figure 2) and the suitability of curriculum development (Figure 3).
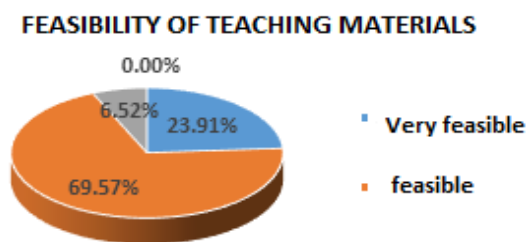
Figure 2 The feasibility of productive subject teaching materials

From the observations and interviews, it can be seen that the available productive teaching materials have been declared as feasible and very feasible at 94.5%. Likewise, in conformity with the 2013 Curriculum, 86.96% of productive subject teaching material has been declared to be in whole or most of the material following the 2013 Curriculum. Not all teaching materials have been updated in accordance with the demands of the 2013 Revised Curriculum. Most of the teachers find it difficult to try to arrange teaching materials that are adapted to a curriculum that changes frequently. Many teachers have complained about curriculum revisions that continue to change.
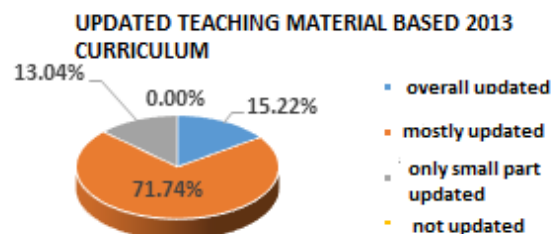
Figure 3 Update on the Appropriateness of Teaching Materials in Accordance with Curriculum

The available teaching material is partially obtained from government-published books, which can be downloaded online (Electronic School Books). Other sources of material are obtained from other reference handbooks. There are no materials have been compiled by the teacher themselves.

When teachers teach, they generally take teaching material by combining material from several different reference books for teaching. In general, the teaching materials used are not comprehensive; that is, the fulfillment of all teaching material needs, including teacher handbooks, student handbooks, and student activity sheets (LKS). Student and student workbooks are still lacking.

From the interviews, in addition to those obtained from E-books and publishers, productive subject learning materials are prepared by the productive subject teachers themselves. There has not yet been a compilation of productive module books compiled collectively by a team of similar subject teacher groups (Subject Teachers' Consultation / MGMP). Because it is prepared by the subject teacher, the teaching material cannot be maximized. This is due to difficulties in finding material updates, time, and cost.

All textbooks, library sources of teaching materials (reference books), as well as copies of books or modules for the teacher's hand, are already in the library. However, the number is not proportional to the number of students. Not all students can have access to these teaching materials. The reason for the insufficient number of books or modules for all students is due to the inadequacy of funds from the school. What is commonly done is that the teacher explains the teaching material in front of the class in the learning process. The teacher also complained that the subject matter did not match the available time allocation. The learning process is actually not in accordance with the demands of the 2013 curriculum, which emphasizes students to be able to learn independently. However, because of the lack of teaching material, the teacher needs more time to explain to the students in front of the class. One obstacle in the transfer of productive learning and teaching processes is the lack of interactive learning media (for example, audio and video tutorials) and learning aids such as LCDs. In addition, there are many teachers who lack IT skills.

Not all teaching materials have been updated in accordance with the development needs of the world of work. One obstacle is the lack of teaching aids or training tools in the form of trainers and practicum needs (materials and tools) that are tailored to the needs. Another obstacle is the lack of access to teaching material that is appropriate to the development of technology used in the field. The factors which become the obstacles cause the productive learning process of SMK in South Sulawesi to be not optimal and can impact on the lack of competency of SMK graduates absorbed in the world of work.

4. CONCLUSION

From the results of the study and analysis, it was concluded that the availability of productive teaching material in Vocational Schools in South Sulawesi Province was still lacking. Productive subject teachers have tried to arrange the compilation of teaching materials that are in accordance with the 2013 Curriculum as a teacher handbook or module. However, due to limited time and money, there are still many teachers who have not compiled productive books or modules to handle students and worksheets. Another obstacle is the number of productive subject learning

materials is not proportional to the number of students. Not all students can be met their needs in accessing teaching materials that are owned by the teacher. This causes the learning process is less in accordance with the demands of Curriculum 2103, which emphasizes students to be able to learn independently. The learning implementation process is also constrained by the lack of teaching aids or training tools in the form of trainers and practicum requirements (materials and tools) that are in line with the development needs of DUDI. The factors which become the obstacles cause the productive learning process of SMK in South Sulawesi to be not optimal and can impact on the lack of competency of SMK graduates absorbed in the world of work. To overcome the lack of access for students to obtain teaching materials, the allocation of funds is needed to increase textbooks so that more students can use them. More training/workshops are also needed to increase the knowledge of educators who work with academics and industry regularly. This is intended so that teachers can follow the latest developments in science and technology that have been carried out in the world of work circles. To improve the ability of productive subject teachers in the preparation of teaching materials, the education office needs to hold training in the manufacture of teaching materials regularly.

ACKNOWLEDGMENT

REFERENCES

[1] B. P. Statistik, "Keadaan Ketenagakerjaan Indonesia Agustus 2017," BPS, 2017. .

[2] G. Chryssolouris, D. Mavrikios, and D. Mourtzis, "Manufacturing systems: skills & competencies for the future," Procedia CIRp, vol. 7, no. 2013, pp. 17–24, 2013.

[3] R. Dubin, The world of work: Industrial society and human relations. Taylor & Francis, 2017.

[4] Y. Estriyanto, S. Kersten, P. Pardjono, and H. Sofyan, "The missing productive vocational high school teacher competency standard in the Indonesian education system," J. Tech. Educ. Train., vol. 9, no. 1, 2017.

[5] H. Retnawati, S. Hadi, and A. C. Nugraha, "Vocational High School Teachers' Difficulties in Implementing the Assessment in Curriculum 2013 in Yogyakarta Province of Indonesia.," Int. J. Instr., vol. 9, no. 1, pp. 33–48, 2016.

[6] D. L. Stufflebeam and G. Zhang, The CIPP evaluation model: How to evaluate for improvement and accountability. Guilford Publications, 2017.

● **Excluded from Similarity Report**

- Internet database
- Quoted material
- Small Matches (Less then 10 words)

- Bibliographic material
- Cited material
- Manually excluded text blocks

EXCLUDED TEXT BLOCKS

Advances in Social Science, Education and Humanities Research, volume

Universitas Pendidikan Indonesia on 2020-06-19

3rd International Conference on Education, Science, and Technology (ICEST 2019

www.atlantis-press.com

Study of Availability of Productive Subjects' TeachingMaterials in Vocational High ...

Far Eastern University on 2023-04-17