

# STUDY OF PRODUCTIVE LESSON TEACHING IN VOCATIONAL HIGH SCHOOL RELATIONSHIP RELATED TO THE READINESS OF GRADUATES IN DEALING WITH WORK WORLD IN SOUTH SULAWESI

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## **Abstract**

*The results of the official release of the Central Statistics Agency of South Sulawesi Province stated that graduates of the Vocational High School (SMK) level were ranked among the highest in terms of non-absorption of graduates in the world of work. This fact is ironic because SMK graduates are graduates who are projected to be ready to work. Aligning the competencies of SMK graduates with their absorption in the world of work cannot be separated from productive subject learning. It is also a fact that until now the government has only been able to provide a small amount of teaching materials in the form of textbooks or modules for productive subjects for teachers and students. Most productive teaching materials are managed by the teachers who support these subjects. Therefore, a study on 2013 curriculum-based teaching materials for productive subject groups of Vocational Schools especially in South Sulawesi related to the readiness of SMK graduates to face the world of work is very much needed. This type of research is evaluative research in the form of ex-post facto. From the results of the study and analysis, it was concluded that productive subject teachers have tried to arrange teaching materials in accordance with the 2013 Curriculum as a teacher's handbook. According to the perception of productive subject teachers, the instructional materials compiled are considered to have been sufficiently in accordance with the development needs of DUDI and meet the adequacy of graduates' competencies and skills. Obstacles that are found in the field are the number of productive subject learning materials is not proportional to the number of students and the learning process is constrained by the lack of teaching aids or training tools in the form of trainers and practicum needs that are in line with DUDI's development needs. The factors that become obstacles cause the productive learning process in Vocational Schools in South Sulawesi to be not optimal which can impact on the readiness of SMK graduates to enter the workforce.*

**Keywords :** *teaching materials, productive subjects, vocational high schools*

## **INTRODUCTION**

The Central Statistics Agency (BPS) of South Sulawesi Province released that graduates of Vocational High School (SMK) education ranks among the highest ranks in terms of not absorbing graduates in the world of work in South Sulawesi (Provincial BPS South Sulawesi, 2019). This fact is ironic because SMK graduates are graduates who are educated to be human beings ready for work. This fact shows that SMKs, as a vocational education prepared to be educated, skilled, and work-ready, have not functioned optimally.

Because the role of SMKs is seen as strategic in improving the quality and competitiveness of Indonesian human resources, the government stressed the need for SMK revitalization through Presidential Instruction Number 9 of 2016 concerning Revitalization of Vocational High Schools. The revitalization process of SMKs in the field is still constrained by several things, among others, the lack of numbers and competencies of educators and vocational education staff, as well as the lack of evenly available quality teaching materials.

The main obstacle to the SMK revitalization process felt by productive subject group teachers is the unavailability of teaching materials that can be used for teaching and learning activities in accordance with the 2013 Revised Crikulum. Until now, the government has only been able to prepare a small portion of teaching materials in the form of handbooks or modules for productive subjects both for teachers and students. Productive subject matter books or modules are more self-managed by the subject

matter teacher by compiling their own productive subject matter teaching materials. The completeness, quantity, and quality of productive subject teaching materials is highly dependent on the business of the school and subject matter teachers concerned to meet their needs.

Subjective teaching material contains studies of vocational knowledge and practical skills tailored to the expertise program chosen by students during their vocational level. Seeing the many competency skills at the Vocational School level, the amount of productive subject learning materials is so much adjusted to the number of subjects and must be constantly *updated* according to current curriculum development and the needs of the world of work.

In his research, Huda (2013) concluded that there was a lack of relevance between productive subject competencies and the world of work in the implementation of industrial work. This was also concluded by Jumardin (2014) who observed the work practice program of vocational health students at Persada Wajo Vocational School. Likewise, Mulyadi's research (2014) also concluded that there was a lack of relevance between productive subject competencies and the world of work in the implementation of industrial work in the 3 (three) SMKs they studied. Because of the importance of the existence of productive subject learning materials as one of the spearheads of successful learning in vocational high schools, the study of teaching materials related to the readiness of graduates in dealing with the world of work, especially in South Sulawesi is needed.

## Research Method

### 1. Types and Research Procedure

This research is evaluative type in the form of *ex-post facto*. The research model used refers to the CIPP evaluation model proposed by Stufflebeam (1971) and expanded by adding the Outcomes (O) component to become the CIPPO model. The use of the CIPPO evaluation model is able to provide a detailed and comprehensive picture of the program's success. This is in accordance with the opinion of Amat Jaedun (2010).

CIPP is an evaluation model with targets in the form of (1) *Context evaluation* (evaluation of the context), (2) *Input evaluation*, (3) *Process evaluation* (evaluation of the process), and (4) *Product evaluation* (evaluation of results). The four words mentioned in the abbreviation CIPP are valuation targets, which are nothing but components of the process of a program of activities.

The CIPPO evaluation model has five components including context (*context*), input (*input*), process (*process*), results (*product*), and impact / output (*outcomes*). Tahapan Cippo research tailored to the research conducted, namely:

- a. *Contexts*, at this stage begins the description and refinement of the study of the problem, the findings of the initial study, analysis of the content, conditions, objectives, implementation process, and the results to be achieved from the study
- b. *Input*, at this stage, the form of activities and strategies designed to be used in this study, including all instruments needed during the study, types of documents required, interview guidelines, observation guidelines, and questionnaires / questionnaire.
- c. *The process*, at this stage, field observations were carried out to obtain real data using all the instruments that had been prepared, conducting FGDs with teachers, school principals and district heads at the district level, discussing and validating findings in the field. At this stage a matrix of constraints / problems will also be found in preparing the availability of productive subject learning materials.
- d. *Product*, at this stage in-depth analysis is repeated to formulate findings. An understanding of each of the results and findings is needed to compare the theoretical review and evaluation framework that has been designed.
- e. *Outcomes*, on tAHAP planned actions recommended from the findings of the mapping results. Implementation at this stage of the study was carried out on a limited scale.

### 2. Population, Samples, and Data Collection Techniques

The study population was all SMKs in the South Sulawesi Province. Sampling is done by *stratified random sampling technique*. The research data collection was carried out by *direct observation*. Data was collected by observation, documentation, interview, checklist, and FGD with the school.

## RESULTS AND DISCUSSION

were 92 (ninety two) research respondents teaching productive subjects. Respondents included 46 (forty six) study programs at vocational schools in 8 (eight) districts / cities in South Sulawesi Province, namely Makassar, Sinjai, Soppeng, Bone, Bulukumba, Sidrap, Pare Pare, and Tana Toraja. Respondent details obtained are presented in Table 1.

Table 1. Respondent Details in the Research

| DISTRICT / CITY                   | NAME SCHOOL  | NAME OF PRODI                                  |
|-----------------------------------|--|--|
| Sinjai                            | State Vocational School 1 Sinjai                     | Computer Engineering and Networking            |
|                                   |  | Dress  |
|                                   |  | Online Business and Marketing                  |
|                                   |  | Accounting and Finance Institute of            |
|                                   |  | Automation and Office Management               |
| Makassar                          | Vocational School State Vocational School 3 Makassar | Construction and Property Business             |
|                                   |  | Automotive                                     |
|                                   |  | Engineering Solar and Hydro Solar Energy       |
|                                   |  | Engineering Electric Power Installation        |
|                                   |  | Engineering                                    |
|                                   |  | Design Modeling and Building Information       |
|                                   |  | Welding  |
|                                   | SMK Negeri 10 Makassar                               | Engineering Light Vehicle Engineering          |
|                                   |  | Light Vehicle                                  |
|                                   |  | Engineering Computer and Network               |
|                                   |  | Engineering Electricity                        |
|                                   |  | Engineering Electronics Industrial             |
|                                   |  | Engineering Engineering Building               |
|                                   |  | Engineering Welding                            |
| Engineering Machinery Engineering |  |  |
| Soppeng                           | SMK Negeri 3 Soppeng                                 | Cooling and Air Conditioning                   |
|                                   |  | Techniques Electrical Power Installation       |
|                                   |  | Techniques Computer Engineering and Networks   |
| Bone                              | SMK Negeri 4 Bone                                    | Automotive                                     |
|                                   |  | Engineering Welding                            |
|                                   |  | Techniques Computer Engineering and Networks   |
| Bulukumba                         | SMK Negeri 4 Bulukumba                               | Electrical Engineering Power Installation      |
|                                   |  | Agribusiness and Agroteknologi                 |
| Tana Toraja                       | SMK 1 Tana Toraja                                    | Computer Network                               |
|                                   |  | Design Modeling and Architecture Engineering   |
|                                   |  | Lightweight Vehicle Engineering                |
|                                   |  | Mechanical Welding                             |
|                                   |  | Installation Engineering Electrical Power      |
| Pare Pare                         | SMK N 3 Pare Pare                                    | Engineering Construction and Property          |
|                                   |  | Computer Engineering and Networks              |
|                                   |  | Hotel Accommodation                            |
|                                   |  | Engineering Information and Communication      |
|                                   |  | dressmaking                                    |
|                                   |  | Tata Beauty                                    |
| Sidrap                            | SMK N 3 Sidrap                                       | Techniques Production and Broadcast TV Program |
|                                   |  | Light Vehicles                                 |
|                                   |  | Agribusiness Poultry Livestock                 |

|  |  |   |
|--|--|---|
|  |  | Welding   |
|  |  | Techniques Electrical Power Installation Techniques |
|  |  | Animal Nursing                                      |
|  |  | Agribusiness Plants                                 |
|  |  | Automotive Engineering                              |

Related to the role of productive subject learning, following the results of the analysis of the perceptions of the teachers compiling productive subject teaching materials related to *update* improvement teaching materials are in accordance with the development of DUDI's needs and fulfillment of expectations in providing the provision of vocational graduates skills in finding work.

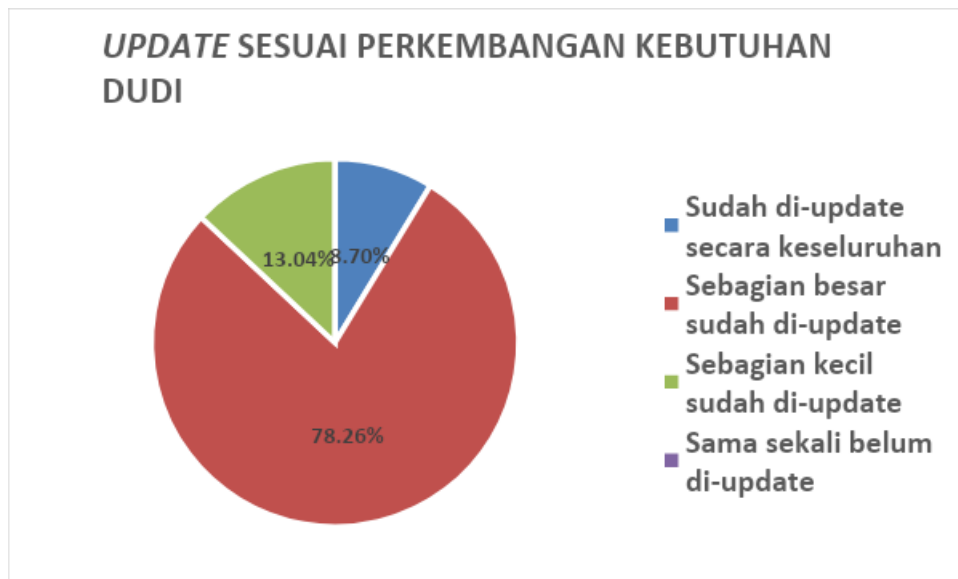


Figure 1. Perception *Update* on Improvement of Teaching Materials in Accordance with the Development of DUDI Needs

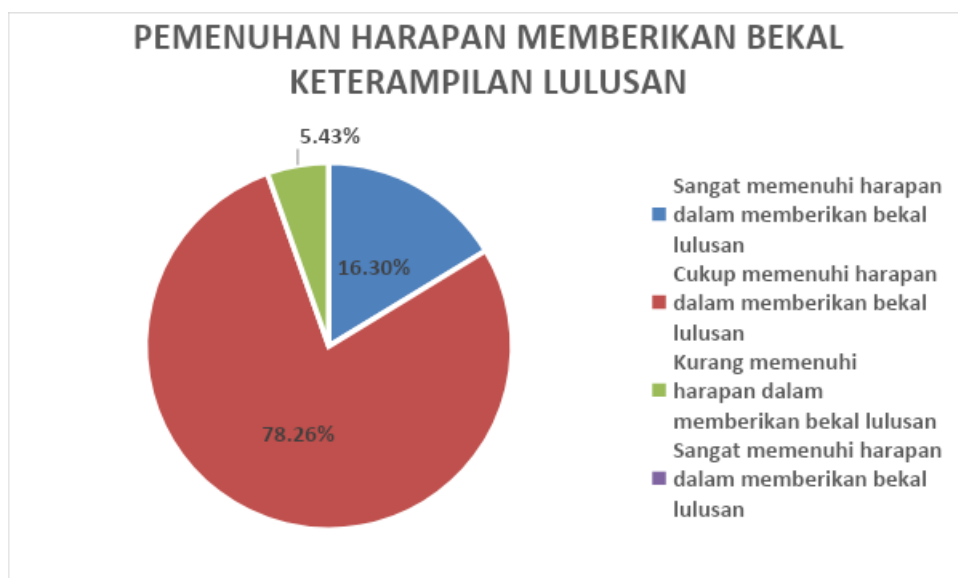


Figure 2. Perception of Function of Teaching Materials Related to Fulfillment of Expectations in Providing Graduates Skills for Finding Work.

From Figure 1 it can be seen that 86.96% of the teachers compiling productive subject learning materials perceive that the teaching materials they have prepared have been improved and are stated to be most or all in accordance with the development needs of DUDI. Likewise in Figure 2, it can be seen that 94.56% of the teachers compiling productive subject teaching materials perceive that the compiled teaching material has been stated to be sufficient or very fulfilling expectations in providing the provision of vocational graduates skills in finding work.

This high perception of the quality of the teaching materials it compiles can have an unfavorable effect on the subject matter of productive learning, that is feeling satisfied that the material taught is complete enough and has represented the progress of science and technology in the world of work. In reality, the perception of productive subject teachers who state that the teaching material is good enough is not in accordance with the picture of reality in the world of work.

According to the Central Sulawesi (BPS) Central Sulawesi Province report, the open unemployment rate (TPT) in South Sulawesi Province is dominated by SMK graduates (BPS Province South Sulawesi, 2019). The number of SMK graduates who are not absorbed by the world of work in South Sulawesi from February 2017 to February 2019 is summarized in Table 2.

Table 2. Vocational School Graduates Not Absorbed in the World of Work in South Sulawesi Province

|  | Period        |             |               |                      |
|--|---------------|-------------|---------------|----------------------|
|  | February 2017 | August 2017 | February 2018 | February 2019        |
| <b>Total not absorbed in world of work</b>                 | the190 441    | 213 695the  | 224 885person | 225 281 people       |
| <b>SMK graduates are not absorbed in the world of work</b> | 6.35%         | 11.92%      | 9.69%         | 11.29%               |
|  | second place  | first rank  | second rating | second rank          |
|  | The 12 093    | 25 473 the  | 21 792people  | 25,435 people<br>The |

fact is the large number of SMK graduates in South Sulawesi Province who are not absorbed into irony because SMK graduates are considered graduates who are educated to be ready to work. This fact shows that SMKs, as a vocational education that are prepared to be educated, skilled, and work-ready, have not been able to function optimally. In connection with harmonizing the competencies of vocational graduates so that they can be absorbed in the workforce, they cannot be separated from the stock of knowledge and skills of vocational students through the productive learning process.

From observations and interviews, identification of productive subject learning materials includes aspects of general information, content of teaching materials, details of time, evaluation of learning outcomes, and use of language. Identification and feasibility assessment of teaching materials is done by assessing the teacher RPP productive maple used for the preparation of the learning process are presented in Table 3 and Figure 3.

Table 3. Identification of Subjects ratings

| AspectsRateInstructional Materials EarningGroup                              | Average     | Description |
|--|-------------|-------------|
| Rate aspects of public information materials teaching                        | 3.21        | Good        |
| Materials Assessment aspects of the content of teaching materials            | 3.26        | Good        |
| assessment aspects of the time details of teaching materials                 | 3.20        | Good        |
| Assessment aspects of the evaluation of learning outcomes teaching materials | 3.16        | Good        |
| Assessment aspects of the use of language teaching materials                 | 3.20        | Good        |
| <b>Average Assessment of All Aspects of Materials Teaching</b>               | <b>3.21</b> | <b>Good</b> |

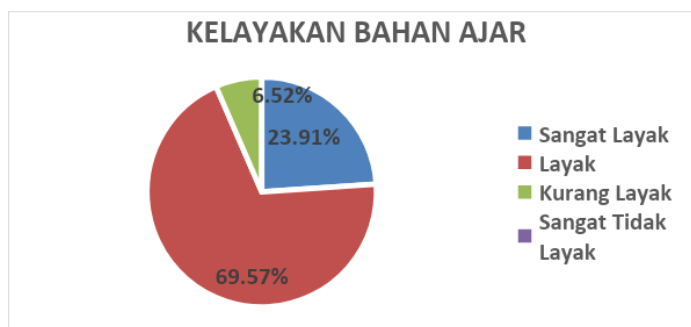


Figure 3. Feasibility of Teaching Materials

From Table 3 it can be seen that the assessment for the identification of teaching materials in general can be categorized as good. Likewise from Figure 4 it can be seen that the available productive teaching materials have been declared as feasible or very feasible at 94.5%. Good and decent category 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 good and complete Learning Implementation Plan (RPP) in preparation for the learning process in each semester. The complete lesson plan contains material to be taught as an appendix.

The assessment of the identification of instructional materials and the feasibility of productive subject learning materials which are categorized as good means that the existing teaching materials are appropriate in terms of the format and adequacy of teaching materials in accordance with the 2013 Revised Curriculum. Almost all teachers admit that it is difficult to arrange teaching materials that are adapted to a curriculum that changes frequently. Many productive subject teachers complained about the revision of the curriculum that is constantly changing.

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 4 below.

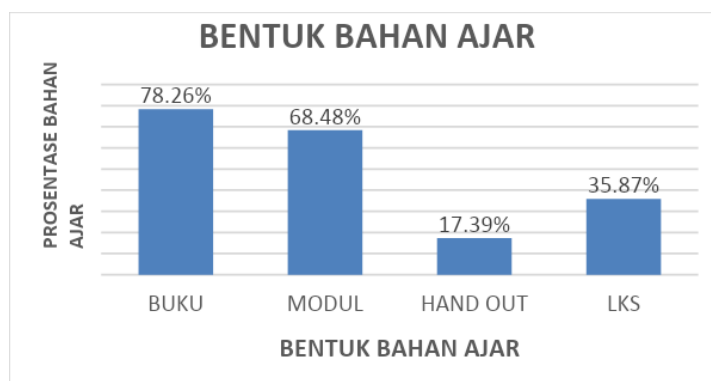


Figure 4. Forms of Productive Subjects Teaching

Materials There is a small portion of teaching material obtained from government-published books that can be downloaded *online* (Electronic School Books / BSE). Other sources of material are obtained from other reference handbooks issued by publishers. There are no productive subject teachers who have teaching materials in the form of books that they have compiled or composed themselves. When teachers teach generally take teaching material by combining material from several different reference books as a reference for teaching. Generally teaching materials used are not comprehensive and have not met all the needs of teaching materials. Most productive subject teachers only have teacher handbooks, while student handbooks and student activity sheets (LKS) are still lacking.

From the interviews, in addition to those obtained from BSE books and publishers, productive subject learning materials are prepared by the productive subject teachers concerned as teacher's handbook. 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 arranged by the subject teacher, the teaching material cannot be maximized. This is due to difficulty finding *updated* material, time, and cost. The rapid pace of development of science and technology,

many teachers have difficulty accessing teaching material in accordance with the development of technology used in the field. Some study programs that admit to experiencing such difficulties include Industrial Electronic Engineering, Electrical Engineering, Building Engineering, Construction and Property Engineering, TV Program Production and Broadcasting Engineering, Poultry Livestock Agribusiness, Animal Nursing, Information Technology and Communication, Light Vehicle Engineering, Mechanical Engineering, Solar Hydro and Wind Energy Engineering, Online Business and Marketing, Office Automation and Governance, and Accounting and Financial Institutions

All textbooks, library resources for teaching materials (reference books), as well as copies of books or modules for teacher handouts are in place library. However, the number is not proportional to the number of students. Not all students can be met the needs in accessing these teaching materials. The reason for the insufficient number of books or modules for all students is due to the unavailability of funds from the school.

Due to the incompatibility of the need for the amount of teaching materials with the number of students, what is commonly done by the teacher is to explain the teaching material in front of the class to students in the learning process. Students also don't have student handbooks and worksheets. The learning process is actually not in accordance with the demands of the 2013 curriculum which emphasizes students to be able to learn independently so that the results of the productive learning process become less optimal.

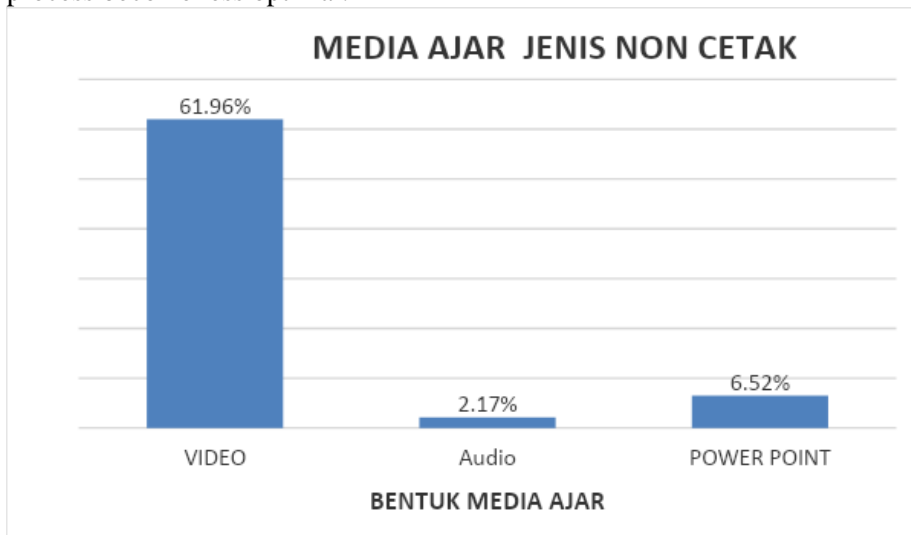


Figure 5. Forms of Non-Print Type of Teaching Media

One obstacle in the transfer of productive teaching and learning process is the lack of interactive learning media and learning aids such as LCDs. In addition, many teachers lack IT skills. Figure 5 shows that there is still a lack of productive subject teachers using facilities *Power Point* and that many teachers carry out conventional learning processes.

Although they have tried to develop teaching materials in accordance with the development needs of DUDI, in reality there are still some obstacles. 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 of DUDI. Some subject teachers who complained about the lack of teaching aids and practical needs include Computer and Network Engineering study programs, Animal Nursing, Plant Agribusiness, Electricity Engineering, Light Vehicle Engineering, Mechanical Engineering, and Automotive Engineering.

## CONCLUSION

From the results of the study and analysis it was concluded that the availability of productive subject learning materials in Vocational Schools in South Sulawesi Province is still very lacking for all students. Productive subject teachers have tried to arrange the compilation of teaching materials that are in accordance with the 2013 Curriculum as a book or module for teacher guidance. 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 DUDI's development needs. The factors that become obstacles cause the productive learning process in Vocational Schools in South Sulawesi to be not optimal which can impact on the readiness of SMK graduates to enter the workforce.

## SUGGESTIONS

To overcome the lack of access of students to obtain teaching materials required injection support from government funding to multiply textbooks so that more students can use them. Productive subject teachers are expected to be given the opportunity to follow the latest developments in science and technology that have been carried out among DUDI by holding more training / workshops to increase the knowledge of educators who collaborate with academics and industry regularly. This is intended to be able to equate perceptions about material subject matter of productive productive teaching between teachers and DUDI in order to prepare vocational graduates to enter the workforce. 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. There is also a need to empower a group of teachers of the same subject (MGMP) for the preparation of productive module books compiled collectively by the team to have the same perception and better quality of teaching materials.

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