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# **Evaluation on Practice Assessment of Light Vehicle Chassis and Powertrain Maintenance Subject at Vocational High Schools**

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This study aims to investigate the implementation of the Practice Assessment of Light Vehicle Chassis and Powertrain Maintenance (LVCPM) in Vocational High Schools (VHSs). This is a descriptive evaluative study in which the data were collected from 28 teachers teaching practicum of LVCPM subject at 14 partners VHSs. The data in this study were collected through surveys and documentation before being analyzed using descriptive quantitative and qualitative methods. The results of this study show that first, about 82% of the LVCPM practice competencies can be taught at VHSs; thus, the results of the LVCPM practice assessment given by the lecturers cannot represent all competencies stated in the curriculum implemented. Second, the lack of facilities, practicum equipment, and teachers' competencies are the reasons why the practicums of LVCPM are not implemented. Moreover, the students' workload is ludicrously heavy. Third, all teachers make use of performance tests, most teachers (64%) use a combination of performance test and portfolios, a few teachers (21%) use a mix of project and performance tests, and only a small number of teachers (7%) use a combination of the three assessment techniques, namely performance test, projects assessment, and portfolios to evaluate student achievement. Although all teachers use job sheets, not all of them have complete assessment sheets. At last, the obstacles faced by teachers are related to limited competencies and understanding of developing practice assessment instruments that are in accordance with the implemented curriculum, and they think that they are not capable of developing practical assessment tools.

Keywords: implementation, assessment, LVCPM practicum, evaluation, schools

## INTRODUCTION

There was a newly implemented curriculum for vocational education, in general, starting in 2013, which is named as 2013 Curriculum. The implementation of this curriculum has

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changed the educational paradigm from behavioristic to constructive. It requires not only changes in the learning process but also changes in assessment (Sudira, 2017). The old paradigm of learning assessment is more emphasized on results, thus it tends to assess cognitive competence through various questions, such as multiple-choice, correct and incorrect statements, and matchmaking. The test cannot picture students' attitudes, skills, and knowledge regarding their real-life outside of school or in society. In addition, affective and psychomotor aspects are also neglected in this form of test. Therefore, the shift of the evaluation assessment on the student is highly required.

According to (Mulyasa, 2013), the 2013 Curriculum focuses on attitudes, knowledge, and skills only. These are explicitly stated in the core competences that students must acquire. The 2013 curriculum states that learning activities should put the scientific approach first. This approach includes some activities such as observing, asking, training, trying, reasoning, and communicating. This fundamental change has an impact on the scoring system that tends to be more suitable with authentic assessment (Pantiwati, 2016). This is due to the high differences between the previously implemented curriculum to the new one in many aspects.

A preliminary observation at several vocational high schools located in the Special Region of Yogyakarta has been carried out. Based on interviews with teachers teaching LVCPM subjects in 2018, The main problem, especially those related to practical learning, were found. In the learning process, many teachers found it hard to assess student learning achievement, particularly in practicum subjects including LVCPM since the teachers are prepared to start the assessment. They think that the number of practice assessment tools has high variation, which affects the implementation of practice assessment on student learning achievement.

Based on the explanation above, it can be stated that there are still many problems related to the implementation of education policies at VHSs, especially competency-based learning which is one of the main goals of the 2013 Curriculum. As an effective assessment is a purposeful assessment, assessment instruments should be developed, specifically for assessing practicum competence that can measure student achievement and skills in practicum subjects authentically.

Until recently, how the practicum of LVCPM is assessed at VHSs with the Automotive Engineering program is unknown. In VHSs located in the Special Region of Yogyakarta, this kind of assessment is not implemented so as at the national level. Therefore, it is important to conduct a study on how the implementation of practice assessment in LVCPM practicums at VHSs.

## **Literature Review**

## **Evaluation**

Based on several experts' opinions about evaluation (Adnan et al., 2019; Andrade, 2019; Chen, 2017; Gu, 2020; JH & Baderiah, 2020; Ratminingsih et al., 2018; Wirawan et al., 2018; Yahiji et al., 2019; Yudianto et al., 2019), it can be concluded that evaluation is an activity planned to assess the achievement of a program for decision

making. In addition, it is stated by Republic of Indonesia Law Number 20/2003 article 57 paragraph (1) on the National Education System that evaluation is carried out in order to control the quality of education nationally as a form of teachers' and institutions' accountability to interested parties.

In fact, there are many evaluation models that are generally used to determine to what extent a program can be conducted and what steps to be taken in the future. The evaluation model developed by some experts is (1) Goal-Oriented Evaluation Model (Nawai & Rahmat, 2019; Ruete & Leynaud, 2015; Takanobu et al., 2020) (2) Formative - Summative Evaluation Model (Hamdi, 2020; Mohammed, 2021), (3) CIPP Evaluation Model (Darma, 2019; Finney, 2020; Stufflebeam, 2002; Warju, 2016), (4) Discrepancy Model (Gardner et al., 2021; Mustafa, 2021; Psycinfo, 2021), (5) Countenance Evaluation Model (Fauziah et al., 2019; Mustafa, 2021; Theresa, 2018; Warju, 2016).

### **Learning Assessment**

Assessment is a process of collecting information to be used as a basis for making decisions related to students, curriculum, programs, and schools. Meanwhile, learning assessment is all activities designed and carried out deliberately and systematically to collect information to be used as a basis for making decisions about students' knowledge, attitudes, and skills for various learning needs/objectives (Mulyasa, 2013).

The development of assessment techniques in the affective domain is not as fast as the development of assessment techniques for the cognitive domain. Assessment techniques employing questionnaires and observations are often used to assess the achievement of learning objectives in the affective domain. In the psychomotor domain, there are six classifications(Anderson et al., 2001), namely: reflex movement, basic movements, perceptual abilities, physical abilities, trained movements, and non-discursive communication. Performance assessment is a technique often used to measure learning achievement in the psychomotor domain. The types of assessment of learning achievement can be categorized into several groups. The forms of performance assessment instruments can vary, such as progress charts, work sample tests, and portfolios. Progress records are generally in the form of charts containing a list of daily activities, scores achieved, and student names.

The curricula, which then focus on learning materials are now aimed at developing students' competences. This change leads to the change of assessment management systems. Schools must reorganize and find ways to collect relevant information so that they can re-design (rearrange) curriculum and assessments to measure student learning achievement. According to (Tillema et al., 2000), there are several requirements to conduct truly competency-oriented learning. First, student-oriented learning requires flexibility in the learning process. Second, work-oriented or competency-oriented programs must be developed and offered. Third, schools must differentiate the lesson packages for specific target groups (work-domain). Fourth, coherence must be organized between various learning strategies in the vocational education system. Fifth, different models of learning and assessment approaches must be developed. In relation to the requirements, competency standard-based assessment should become an authentic

reflection of field practice (workplace practice). Moreover, the assessment should be fully standardized, so graduate users know exactly what competency/skill that a certificant has (Wolf, 1998).

In competency-based learning, it is crucial to pay attention to student possessed competences. Cohen (Cohen, 2013) argues that the recognition of prior learning is a key element in the implementation of competency-based training. It is a formal procedure in appreciating the abilities that students already have as a result of both learning and working experiences.

# **Skill Assessment**

Skill assessment is an assessment carried out to determine students' abilities to apply knowledge in order to perform certain tasks in various contexts according to indicators of competence attainment. Skill assessment may be carried out using various techniques, such as performance tests, project assessments, and portfolio assessments. The skill assessment technique used is selected according to Basic Competence/BC characteristics of Basic Competence (BC) in Core Competency- 4 related to practical skills. The results of the skill competency assessment during and after the learning processes are presented in numbers ranging from 1-100 and descriptions (Guidance, 2018).

## **Skill Assessment Technique**

Performance test is used to measure learning achievement from some aspects, namely skills performed, products developed, or skills and products, for example (1) skills in using tools and/or materials and implementing work procedures to develop a product; and (2) product quality based on technical and aesthetic criteria. The instrument used in assessing is in the form of a checklist or rating scale completed with a scoring rubric. The skill assessment scheme is presented in Figure 1 below.

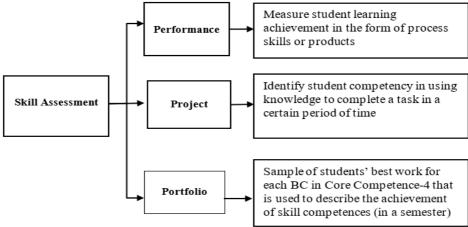


Figure 1 Scheme of skill assessment (Ministry of Education and Culture/Kemdikbud, 2018)

Performance test is carried out to comprehensively assess starting from the input (input), process, and output (output) of learning which includes the domains of attitudes, knowledge, and skills. Performance tests may also assess student readiness, learning process, and student learning achievement as a whole. The integration of input, process, and output represents the capacity, style, and student learning achievement. Furthermore, the integration is able to produce instructional effects and nurturant effects of learning (Kemdikbud Republic of Indonesia, 2019).

Performance test is also able to reflect the increase in student learning achievement in observing, questioning, reasoning, and developing networks. Performance tests tend to focus on the task and are contextual, thus enabling students to demonstrate their competences which include attitudes, knowledge and skills in real life. Therefore, performance tests are relevant to the scientific approach in the teaching learning process at VHSs.

Performance assessments that emphasize results or products developed are commonly called product assessments, while performance assessments that emphasize processes and products are called practice assessments. The aspect assessed in the performance assessment is the process or the quality of the product or both, for example (1) skills in using tools and/or materials and implementing work procedures to develop a product; and (2) product quality based on technical and aesthetic criteria (Kemdikbud Republic of Indonesia, 2019).

The steps to conduct skills assessment include (1) identifying all important steps affecting the final result, (2)list and rank of all aspects of specific abilities that are important and necessary in order to complete a certain task and generating the best final results, (3) limiting the aspects of the ability to be measured so that everything can be observed while students carry out the assignment, (4) Clearly defining all aspects of the ability to be measured and making sure that the skills and products are observable, and (5) checking and re-comparing all aspects of the skills previously possessed by other people in the field. In administering the performance assessment, it is necessary to prepare an observation sheet and an assessment rubric to observe student behavior during practicum or while developing the products (Sofyan, 2015).

Project assessment is an activity to determine the student's ability to apply their knowledge by completing assignments within a certain period of time. Project assessment can be carried out to measure one or several basic competences. This project is in the form of a series of research activities that involve some steps, such as planning, data collection, data organizing, data processing, and presentation, and reporting. Project assessment can also be carried out by several subject teachers related to the project by taking into account the aspects of basic competences being assessed.

A portfolio assessment is a continuous assessment based on a reflective-integrative collection of information that shows the development of students' abilities in a certain period. There are several types of portfolios, namely documentation portfolios, process portfolios, and display portfolios. Teachers can choose the type of portfolio in accordance with the basic competences and/or the context of the subject. For the

assessment of skills competences at VHSs, student portfolios can be in the form collections of performance tests and projects completed with photos or product displays.

## Light Vehicle Chassis and Powertrain Maintenance Subject

It is known that in the 2013 Revised Curriculum that applies nationally, the objectives of the curriculum include four aspects of competences, namely (1) competency aspects of spiritual attitudes, (2) social attitudes, (3) knowledge, and (4) skills. These aspects of competences are achieved through the intra-curricular, co-curricular, and extracurricular learning processes (Mulyasa, 2013).

The competency of spiritual attitudes is formulated as "Living and practicing the religious teachings he/she adheres to". Meanwhile, competency of social attitudes is formulated as "Living and practicing honest behavior, discipline, courtesy, care (cooperation, collaboration, tolerance, peace), responsibility, responsiveness, and proactivity through exemplary, giving advice, strengthening, habituation, and sustainable efforts, as well as showing certain attitudes to show solutions to solve various problems in interacting effectively with the social and natural environments in order to put himself/herself as the agent of the nation". Both competences may be achieved through indirect teaching, namely modeling, habituation, and school culture by taking the characteristics of the learning subjects and students' needs and conditions into accounts. The development of attitude competency is done during teaching-learning processes. Furthermore, this competency may become a consideration for teachers in building student character in the future.

LVCPM subject provides students with certain basic competences, especially those relevant to employment, both in the business and the industrial world. The basic competences are in the aspects of knowledge (cognitive) and skills (psychomotor). The basic competences are presented in Table 1.

Table 1
List of BC-3 and BC-4 of LVCPM subject (Ministry of Education and Culture, 2018)

List of BC-3 and BC-4 of LVCPM subject (M	Inistry of Education and Culture, 2018)
Basic Competence/BC (Knowledge)	Basic Competence/BC (Skill)
3.1. Apply the clutch maintenance method	4.1. Regularly maintain the clutch
3.2. Apply the manual transmission maintenance method	4.2. Regularly maintain manual transmission
3.3. Apply the maintenance method	4.3. Regularly maintain automatic transmission
3.4. Apply the propeller shaft maintenance method	4.4. Regularly maintain propeller shaft
3.5. Apply the differential maintenance method	4.5. Regularly maintain the differential
3.6. Apply the wheel axle maintenance method	4.6. Regularly maintain wheel axle
3.7. Apply the conventional brake system maintenance method	4.7. Regularly maintain conventional brake system
3.8. Apply the <i>Antilock Brake System</i> (ABS) maintenance method	4.8. Regularly maintain the Antilock Brake System (ABS)
3.9. Apply the suspension system maintenance method	4.9. Regularly maintain suspension system
3.10. Apply the steering system and power steering maintenance method	4.10. Regularly maintain steering system and power steering
3.11. Remove, Install and Adjust the Wheels	4.11. Remove, Install and Adjust the Wheels
3.12. Dismantle, Repair, and Install the Outer and Inner	4.12. Dismantle, Repair, and Install the Outer and
Tires	Inner Tires
3.13. Select tires and rims for special use	4.13. Select tires and rims for special use
3.14. Evaluate the results of periodic maintenance of the chassis and power transfer	4.14. Evaluate the results of periodic maintenance of the chassis and power transfer
3.15. Diagnose damage on the clutch	4.15. Repair damage on the clutch
3.16. Diagnose damage on Manual Transmission	4.16. Repair damage on Manual Transmission
3.17. Diagnose damage on automatic Transmission	4.17. Repair damage on automatic Transmission
3.18. Diagnose propeller shaft damage	4.18. Repair propeller shaft damage
3.19. Diagnose differential damage	4.15. Repair damage on clutch
3.20. Diagnose wheel axle damage	4.20. Repair wheel axle damage
3.21. Diagnose Conventional brake system damage	4.21. Repair Conventional brake system damage
3.22. Diagnose Antilock Brake System (ABS) damage	4.22. Repair Antilock Brake System (ABS) damage
3.23. Diagnose suspension system damage	4.23. Repair suspension system damage
3.24. Diagnose Steering system damage	4.24. Repair suspension system damage
3.25. Diagnose damage on Spooring	4.25. Repair damage on Spooring
3.26. Diagnose Wheels / Tires balance	4.26. Fix Wheels / Tires balance
3.27. Diagnose tire rim damage	4.27. Repair tire rim damage
3.28. Evaluate the results of chassis and power transfer repairs	4.28. Evaluate the results of chassis and power transfer repairs

From the description above, it appears that the LVCPM is a subject in the expertise package (C3). When viewed from the list of competences, it is shown that this subject provides important knowledge and skills to generate professional graduates. Then, it turns out that skill competency involves various basic skills related to light vehicles.

## **METHOD**

This descriptive qualitative study employed the qualitative approach. Evaluative research is a design and evaluation procedure for collecting and analyzing data systematically to determine the value or worth of an educational practice based on the

results of measurement or data collection using certain standards or criteria that are used absolutely or relatively (Sugiyono, 2016).

The Stake evaluation model was used in this study. The evaluation emphasized two types of operations, namely descriptions and considerations. This model involved three phases in program evaluation, namely preparation, process, and output. It was chosen because the researchers wanted to know the implementation of practice assessment from the point of view of student readiness, planning, and implementation. Through descriptive evaluative research, comprehensive, systematic, and in-depth information collection, the data were obtained.

This study focused on the implementation of practice assessment for LVCPM subject based on the 2013 curriculum at VHS. This study examines 1) types of BC-4 of LVCPM being practiced, 2) the reasons for not conducting practicum of BC-4 Aspects, 3) practice assessment techniques, 4) obstacles in the implementation of LVCPM practice assessment.

This research was conducted at fourteen Vocational High Schools located in the Special Region of Yogyakarta. The schools were partners of Universitas Negeri Yogyakarta as well as the places to conduct field teaching practice and guided field teaching practice for students majoring in automotive engineering. The research participants were all productive teachers teaching practicum of LVCPM subject in Light Vehicle Automotive Engineering (LVAE) program at VHS.

The data required in this study were collected by through surveys and documentation (especially assessment documents). As for its implementation, questionnaires were used to collect data of practicum of LVCPM competences taught to students, information about assessment instruments used to assess student achievement in learning the subject and problems faced by teachers regarding assessment tool development. The questionnaire used was a combination of open and closed-ended types. Moreover, the data were collected through documentation which collects all documents especially those related to learning media and assessment tools.

#### RESULTS AND DISCUSSIONS

Based on the data collected through various data sources, methods, and instruments, the result of this study is presented in the following.

## Types of BC-4 of LVCPM Being Practiced

The data of types of basic competences taught in practicums are presented in Table 2 below.

Table 2 Practicum of LVCPM on BC-4

BC-4	VHS	S numl	ber												Total
Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	VHS
4. 1.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14
4. 2.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14
4. 3.	1	1	0	1	0	1	1	1	1	0	0	1	0	0	8
4. 4.	0	1	1	1	1	1	1	1	1	1	1	1	1	1	13
4. 5.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14
4. 6.	0	1	1	1	1	1	1	1	1	1	1	1	1	1	13
4. 7.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14
4. 8.	1	1	0	1	0	1	0	1	1	0	0	1	0	0	7
4. 9.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14
4.10.	0	1	1	1	1	1	1	1	0	0	1	1	1	0	10
4.11.	0	1	1	1	1	1	1	1	1	1	1	1	1	0	12
4.12.	0	1	1	1	1	1	1	1	1	1	1	1	1	0	12
4.13.	0	1	1	1	1	1	0	0	1	1	1	0	1	0	9
4.14.	0	1	1	1	1	1	1	0	1	1	1	1	1	0	11
4.15.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14
4.16.	1	1	1	0	1	1	1	1	1	1	1	1	1	1	13
4.17.	1	1	0	1	0	1	1	0	0	0	1	0	0	0	6
4.18.	0	1	1	1	1	1	1	1	1	1	1	1	1	1	13
4.19.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14
4.20.	0	1	1	1	1	1	1	1	1	1	1	1	1	1	13
4.21.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14
4.22.	1	0	0	1	0	1	0	0	0	0	1	0	0	0	4
4.23.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14
4.24.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14
4.25.	1	1	1	1	0	1	1	1	1	0	1	1	1	0	11
4.26.	1	1	1	1	0	1	1	1	1	0	1	1	1	0	11
4.27.	0	1	1	1	0	1	0	0	0	0	1	0	1	0	6
4.28.	0	1	1	1	1	1	1	0	1	0	1	1	0	0	9
Total BC	17	27	24	27	21	28	24	22	24	19	26	24	23	15	321

Average of BC-4 taught = 321/14 = 23 = 82%

Table 2 shows that there are several kinds of BC-4 (practical competence) that are not taught as the data shows as many as 82% of the BC points can be implemented/taught due to several factors. The main two factor causing this are due to the lack of facility owned by the VHS and due to the low teacher competence. Based on Table 2, there are ten BC-4 of LVCPM conducted at all VHSs. They are 4.1. Regularly maintain the clutch, 4.2. Regularly maintain manual transmission, 4.4. Regularly maintain propeller shaft, 4.7. Regularly maintain the conventional brake system, 4.9. Regularly maintain suspension system, 4.15. Repair damage on the clutch, 4.21. Repair Conventional brake system damage, and 4.23. Repair suspension system damage. Then four points in BC are partially conducted at all VHSs. They are 4.8. Regularly maintain Antilock Brake System (ABS), 4.17. Repair damage on automatic Transmission, 4.22. Repair Antilock Brake System (ABS) damage, 4.27. Repair tire rim damage. The data in Table 2 are presented in the histogram (Figure 2)

below. The blue color represents the number of sub-basic competences are taught and implemented in the practical lesson of all 14 VHSs. The black color indicates that most of the VHS implemented the sub-basic competencies, and the red color implies the sub-basic competencies is merely implemented in a small portion of observed VHS.

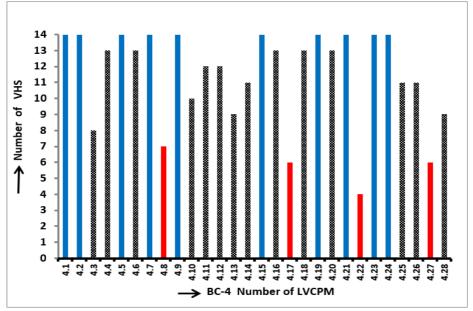


Figure 2
Bar chart of LVCPM basic competences taught

## The Reasons for Not Conducting Practicum of BC-4 Aspects

There are some reasons why some psychomotor aspects in the BC are done not in LVCPM subject in VHS. The following table presents the answer of the teachers being asked the reason of not implementing Practicum of BC-4 Aspects.

Table 3
Types of obstacles in practicum of LVCPM

No	Obstacle	Teachers Facing Problems			
110	Obstacle	Total Teachers	Percentage		
1	Lack of teacher confidence in teaching	4	14.3%		
2	Teachers' irrelevant educational background	3	10.7%		
3	Limited suitable training object	19	67.9%		
4	No relevant teaching media	14	50%		
5	No supporting practicum equipment	19	67.9%		
6	No job sheet	3	10.7%		
7	Limited teaching time allocation	9	32.1%		
8	Other problems	1	3.6%		

Based on Table 3, the obstacles that cause part of the BC-4 LVCPM are not implemented can be summarized into 3 (three) main factors.

- a. Teacher. There are four teachers (14.3%) have an irrelevant educational background. They are teachers with multiple skills.
- b. Facility. Most of the teachers (67.9%) stated that the main obstacle for not implementing certain BC-4 practices was due to limited facilities/media/ practicum equipment, limited suitable training object, and no supporting practicum equipment. Then, as many as 14 teachers (50%) stated that there were no relevant teaching media, and as many as three teachers (10.7%) stated that there is no job sheet available to conduct practicum.
- c. The learning times. There are 9 teachers (32.1%) stated that the time allocated for learning was not sufficient. Thus, the student's learning load is considered to be quite a lot so that there is no time to teach some practice competences.

#### **LVCPM Practice Assessment Techniques**

The technique for assessing the practicum of LVCPM used by teachers teaching VHSs in the Special Region of Yogyakarta is presented in Table 4 below. Table 4

LVCPM practice assessment techniques

No	Assassment Technique	Teacher Using Certain Technique			
NO	Assessment Technique	Total	Percentage		
1	Performance Test	28	100 %		
2	Performance Test and Portfolio	18	64 %		
3	Performance Test and Project-based Assessment	6	21 %		
4	Performance Test, Portfolio, and Project-based Assessment	2	7 %		

Based on Table 4, it can be concluded that

- a. All teachers (100%) use performance test techniques to assess LVCPM practices.
- b. Most of the teachers (64%) carry out the LVCPM practice assessment using a combination of performance tests and portfolios.
- c. Only a few teachers (21%) conduct the LVCPM practice assessment using a combination of project-based assessment and performance tests.
- d. Only a small proportion of teachers (7%) conduct the LVCPM practice assessment using a combination of the three assessment techniques, namely performance test, project-based assessment, and portfolio.

The data above are presented in a chart below.

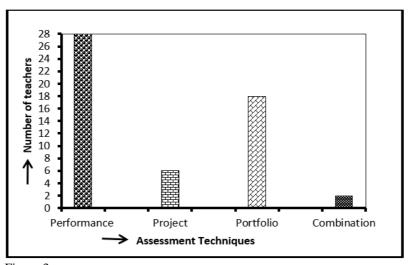


Figure 3 Techniques to assess practicum of CLVPM

# Supporting Instrument to Conduct LVCPM Practice Assessment

In administering LVCPM practice assessment, VHS teachers in Yogyakarta use various instruments that are presented in Table 5 below.

Table 5
Supporting instrument for LVCPM practice assessment

No	Name of Instrument	Teacher Usi	Teacher Using the Instrument			
		Total	Percentage			
1	Practicum lesson plan	21	75 %			
2	Job sheet	28	100 %			
3	Practice preparation assessment sheet	14	50 %			
4	Practice assessment sheet	24	86 %			
5	Work attitude assessment sheet	19	68 %			
6	Scoring rubric for preparation	11	39 %			
7	Scoring rubric for performance	14	50 %			
8	Scoring rubric for work attitude	13	46 %			
9	Others	3	11 %			

Based on Table 5 it can be explained that in assessing the practicum of CLVPM, teachers make use of some instrument.

- a. All teachers (100%) use job sheets, even most of them (75%) are supported by special lesson plans for teaching practicum only.
- b. Not all teachers use the appropriate assessment sheets because it turns out that only 50% of the teachers use the preparation assessment sheet, 86% of the teachers used

the performance assessment sheet, and 68% of them use the work attitude assessment sheet.

c. Only a few teachers use the suitable scoring rubric (scoring guidelines). As many as 39% of the teachers use the preparation scoring rubric, 50% of the teachers use the performance scoring rubric, and 46% of them used the work attitude scoring rubric. It can be further explained that the scoring rubrics used are not detailed.

#### **Obstacles in LVCPM Practice Assessment**

Based on the questionnaire and the results of interviews with some teachers, in general, the obstacles or difficulties experienced by teachers in assessing LVCPM practices are explained below.

- a. Teachers' lack of competence or understanding in making practice assessment tools as mandated in the 2013 curriculum is due to inadequate training.
- b. Many teachers do not fully understand the format of practice assessment tools that could be used to assess the practice.
- c. The teachers have limited competence in compiling a practical and detailed rubric (scoring guidelines) for assessing student readiness in preparation, performance, and work attitude.

#### CONCLUSION

Based on the results of the research, some conclusions are drawn as follows.

- a. Not all of the competences (around 82%) of LVCPM practice as stated in director' general of elementary and secondary education regulation of the Ministry of Education and Culture No. 464/D/D5/KR/2018 are taught in practicums at VHSs. This means that the results of the LVCPM practice assessment given by the teacher are able not to represent all competences in the curriculum implemented.
- b. Some competences are not taught due to limited facilities/practicum equipment, teachers' irrelevant educational background, and student study load that does not allow teachers to conduct more teaching.
- c. All teachers (100%) use performance test techniques to assess LVCPM practicums, most teachers (64%) conduct LVCPM practice assessments using a combination of performance appraisals and portfolios, only a few teachers (21%) conduct LVCPM practice assessments using a combination of performance appraisals and projects, and only a small proportion of teachers (7%) assess the LVCPM practice using a combination of the three assessment techniques, namely performance, project and portfolio assessments.
- d. In assessing the LVCPM practice, all teachers use worksheets, but not all of them use complete assessment sheets, even only a small proportion are equipped with an assessment rubric (guidelines for scoring).

e. The obstacles experienced by teachers in assessing LVCPM practices are mainly related to their limited competence or understanding in making practice assessment tools and other supporting practice assessment instruments in accordance with the 2013 Curriculum.

From the above conclusions, suggestions made by the researchers are elaborated below:

- a. Schools should provide a complete LVCPM practice facilities/media/equipment in accordance with the demands of the curriculum implemented.
- b. Teachers should always improve their competences, especially in relation to the practicum of LVCPM teaching-learning processes, and in conducting practice assessment for the subject.
- Schools should allow teachers to take part in seminars or workshops on LVCPM practicums.
- d. Future recommendation could be proposed to create the general and universal practical lesson assessment that can be adopted by many types of implemented curriculum.

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