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PROFESSIONAL DEVELOPMENT FOR VOCATIONAL HIGH SCHOOL TEACHERS THROUGH INCREMENTAL TEACHER COMPETENCE STANDARDS

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ABSTRACT

This study presents the competence of vocational high school teachers through the implementation of five work dimensions of teachers' incremental standard competence. It was conducted in the framework of the sustainable professional development for vocational teachers using participatory action research at two Vocational High Schools by involving 50 teachers. The study included socialization of incremental competency standards and reflection, mentoring and consultation sessions, and teaching reports and reflection. Data collection used observation, assessment, and teaching reports. To optimize the results, it was ended with a focus group discussion involving the Institute for Education Quality Assurance. The results showed that the teachers' competence in the aspects of the learning plan, learning resource utilization, media utilization, facilitating students' learning needs, ability to create learning evaluation instrument, and following up the learning outcomes were all categorized as good while the aspect of developing students' potentials both curriculum implementation and reflection ability was categorized as very good. It indicates the mentoring and the consultation worked effectively. Meanwhile, the teachers' ability that should be improved is the creation of assessment instruments.

Keywords: competence standard, incremental professionalism development

INTRODUCTION

The most effective way to improve education is by developing teachers competence since the education quality will be based on the teaching quality [1]. Improving the teachers quality with certification seems to show a doubtful impact on the education. In fact, teachers are becoming active only for the certification requirement, but after that, their performance is declining [2]. There is no significant effect on teacher professionalism since many teachers who have been certified are stagnant [3]. Teachers should be aware of the consequences of being professional because it requires them always to develop their knowledge and skills so they can guide their students to face the current challenges [4]. Thus, teachers need to carry out the development of sustainable professionalism of which activity to achieve career advancement and personal development in order to improve the self-quality in carrying out the duties [5]. Standardization of teacher competence in developed countries such as the UK, New Mexico, Australia standard is arranged incremental. For example, England sets the competency standard of teachers into 5 levels namely: (1) Qualified Teacher Status (QTS), (2) Core (C), (3) Post Threshold Teachers (P), (4) Excellent (E), and (5) Advanced Skill Teachers (A) [6]. For being Advanced Skill Teachers, they must pass through QTS, Core, Post Threshold Teachers, Excellent. Each increment level is completed with the demands to improve competence and professional work. In Australia, it has four levels, i.e. (1) graduate, (2) proficient, (3) highly accomplished and (4) leads. To become a lead teacher, they must be through graduate teacher, proficient, highly accomplished [7]. Moreover, New Mexico teacher competency standards are divided into three teaching licenses, namely teacher level I, II and III. Level I license is for beginner teachers, level II is for teachers who meet the requirements of professional teachers and the established criteria [8]. Level III license is for the profession teachers and responsible for

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curriculum development and peer mentoring. Those teaching licenses are periodically updated through performance tests.

In Indonesia, teachers functional level is declared in the regulation of the Ministry of Administrative and Bureaucracy Reform of Indonesia no. 16 Year 2009, in 4 levels, namely beginner, young, associate, and main levels. Implicitly, there is a gap in competence demands for teacher functional levels and the challenge for the teacher to enhance their capacity. The causes are: (1) there is no distiction between authority and obligation in teachers functional position; (2) the assessment standard for teacher's promotion is not completed with the impact for teacher professional work; (3) the assessment of professional teacher performance less reflect the complexity of effective teaching. It is in line with Steer [9] that the professional test system in Indonesia still in the administrative area that fails to represent the complexity of knowledge and skills for professional teachers. Therefore, it is necessary to make the incremental teacher competence standard based on the level of the functional position.

The incremental teacher standard competence in this study refers to the teacher competence standard with the demands of competence depth and working area of incremental professionals. The higher functional position demands more in-depth competence and higher professional working [3]. The different levels of competency depth and professional work area per level are in Table 1.

Incremental competency standards are divided into five dimensions of teacher professional work: (1) facilitating student learning, (2) assessing and reporting learning outcomes, (3) creating a challenging learning environment, (4) participating in curriculum development and (5) making a reflection. As a benchmark of success in implementing the five dimensions, it is arranged the assessment standard for promotion, namely (1) teacher work completeness in preparing lesson plans; facilitating students to learn in the form of learning resources and media, making teaching notes, learning outcomes evaluation, students' learning achievement, teaching reflection and preparing upcoming teaching plans; (2) understanding the way of students' learning; (3) implementing the results of scientific activities for professional development activities into classroom learning and (4) evidence of scientific activities participation for sustainable professionalism development.

Table 1. The Demand for Professional Working Coverage Per Teacher Functional Level

The Demand for Professional Working Coverage Per Teacher Functional Level			
Beginner Teacher	Young Teacher	Associate Teacher	Main Teacher
The teacher carries out the main task and function under the direction and responsibility of the senior teacher as a mentor.	1. Being independence in carrying out the main task and the function as a young professional teacher. 2. Being capable of developing a class-level curriculum. 3. Becoming the role model of the class.	1. Being capable of planning and developing a role in carrying out the main task and function as a professional Associate teacher. 2. Being capable of evaluating, developing school-level curriculum. 3. Affecting positively at the school level. 4. Becoming the role model of school level.	1. Being capable of utilizing the evaluation results to improve the teaching quality. 2. Being capable of developing curriculum, evaluation instrument of education program and training as a teacher coach with industry. 3. Being capable of working as a professional teacher in the school. 4. Affecting positively in other schools 5. Becoming the role of the cross-school level.

The formulation of incremental competence standard in this research is the result of a dissertation that has been validated through expert judgment but not empirically tested yet. This study aimed at testing the feasibility of sustainable professional development of vocational teachers. The implementation of this incremental teacher competency standard is different from the existing teacher competency standard since it is based on the classroom teaching. The problem is whether the teacher can implement the teaching by referring to the standard of this competence. As a new thing, the incremental teacher standard competence demands teachers to concentrate on students' learning activities. If this incremental teacher competency standard is consistently implemented, it ensures the growth of sustainable teacher professional development that can positively impactto educational quality.

METHOD

The study used participatory action research in two Vocational High Schools namely SMK PIRI I and SMKN 3 Yogyakarta involving 50 normative, adaptive and productive teachers. The study was conducted in one cycle covering socialization of incremental teacher competency standard, reflection practice, teaching mentoring, reflection consultation service and preparation of teaching reports for four meetings. The teaching reports were analyzed to measure the level of teachers' understanding in implementing the competence standard. Furthermore, the analysis results were discussed in a Focus Group Discussion (FGD) with teachers, principals, and Institute for Education Quality Assurance in which the results serve as a basis to revise of incremental competency standards. The research design is illustrated in Figure 1.

This study was conducted through the procedure that consisted of several stages. The first stage is to arrange the design. In the second stage, the principal and the coordinator for sustainable professional development in the school discussed the technical implementation as well as the needs for the research supporting materials. Based on the discussion result, several agreements were gathered namely (1) a workshop on reflection teaching practice of the even semester in the academic year of 2016/2017, (2) workshop on socialization of incremental teacher competency standard and preparation for improving even semester teaching design in the academic year of 2016/2017 according to reflection result, and (3) implementation of incremental competence standards into classroom teaching was conducted 4 times face-to-face and ended with learning outcomes evaluation. The class implementation was during August because the learning process of the academic year 2017/2018 began in the middle of July so that the teacher could make some preparation. The next stage is during the learning process, the researcher observed and gave input and consultation session at the schools.

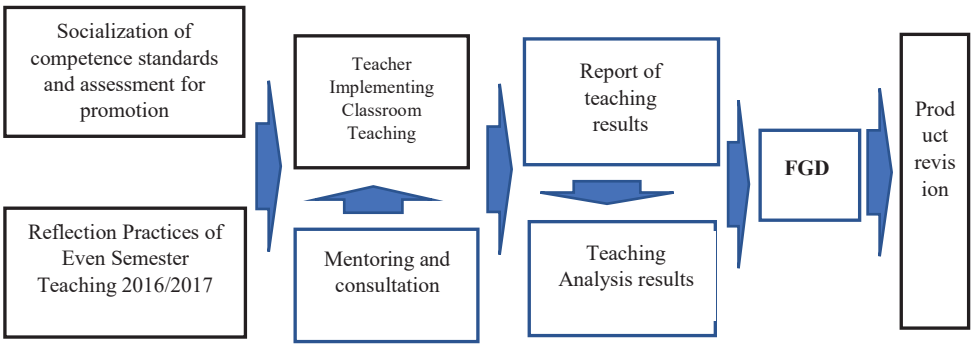

Figure 1. Research Design

The consultation session included the implementation of teaching to be in line with the research design, reflection practice and the teaching report. In the fourth stage, teachers and their peers discussed for reflection and each of them developed a teaching improvement strategy for the next meeting. At the end of the 4th meeting, the teacher evaluated the teaching outcomes. Next, the teachers were given a two-week opportunity to arrange a teaching report referring to the research guidelines during the workshop at the beginning of the study. The research team then analyzed the teaching reports. The research team disseminated the results of teaching analysis to the teachers, the principals, the school supervisors, the Institute for Education Quality Assurance, and the Head of Formal and Informal Education of Yogyakarta. In addition to disseminating the research results, an FGD was done to solve existing problems for the better result in the next occasion. Thus, the invitation was attached with questionnaires containing different questions according to their respective functions. Due to other agenda, the school supervisors and the heads of Formal and Informal Education could not attend FGD session, but they provided support for the sustainability of teacher professional development programs.

RESULTS AND DISCUSSION

In this study, the implementation of the incremental teachers standard competence was limited to the daily teaching activity, such as the completeness of teaching work from the preparation of the teaching design, the utilization of learning resources, the utilization of learning media, the compilation of learning result instruments, the understanding of curriculum implementation and reflection. There were 45 reports collected, but 5 of them were incomplete so that the data that can be analyzed was only 40, the overall assessment result is shown in Figure 2.

Figure 2 showed that most teachers were in the score range of 24.0 to 25.9. The data, then, classified based on the qualification category, the scores > 61% and > 81% were categorized as very good. The implementation of standards competency of incremental teachers were illustrated in Figure 3. In addition, the teachers' performance and the evaluation aspects of teachers' professional work are presented in Table 3 respectively.

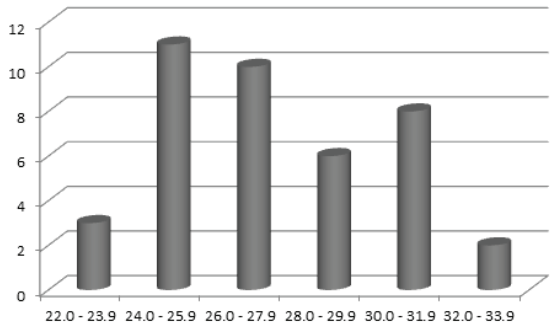

Figure 2. Distribution of Professional Teacher Work Performance Test Results

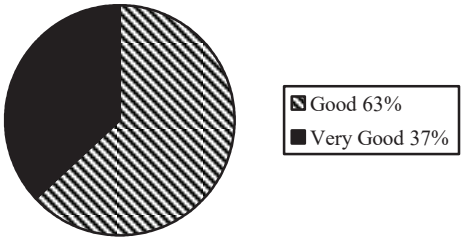

Figure 3. The Proportion of Implementation Results of Competency Standard

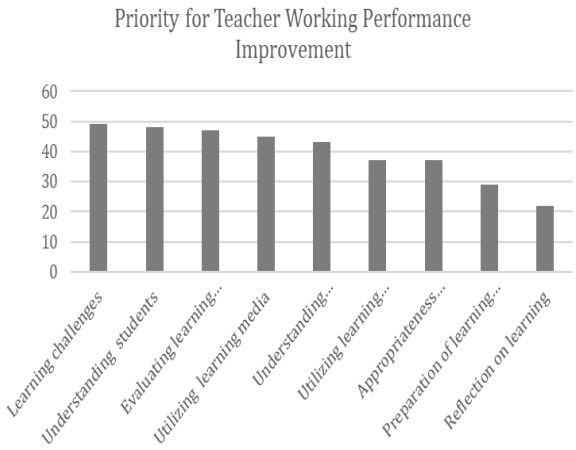

Figure. 4 Teacher Working Performanc

Table 3. The Results of Evaluation Aspects of Professional Work

No	Assessment Aspect	Result	Ideal score	Gap
1	learning design preparation	131		29
2	learning resources utilization	123		37
3	learning media utilization	115		45
4	understanding the students	112		48
5	understanding curriculum implementation	117	160	43
6	evaluating learning outcomes	113		47
7	learning challenges	111		49
8	learning reflection	138		22
9	appropriateness of lesson plans and learning	123		37

Incremental competency standard is a new thing for teachers, so it needs to be socialized as early as possible to avoid different perception between the researcher and the teacher. The teaching improvement is based on the results of teaching reflections in the previous semester, and the weaknesses were improved in order to realize better teaching performance.

The reflection was done by playing a recording from one of the teaching performance at SMKN 3 Yogyakarta. To avoid hurt feelings, then the discussion was focused on the students' attitude towards the learning process. Each teacher criticized the recording and gave reasons based on their teaching experience, and at this stage, there was a valuable exchange of experiences. The discussion resulted in the findings of the severe problems of most teachers in their teaching, i.e., students attitudes like playing cellphones during the learning process as well as coming late. The teacher agreed that a similar problem could be handled in the same way, but personal issues were solved according to each teacher's policy. This experience had provided teachers with reflection at the end of the learning. If teachers were in doubt, it could be discussed with researchers during the consultation session at school. This way effectively improved teacher's reflection ability in which the assessment of reflection aspects was in very good categories.

All assessed aspects except reflection were all in the good category. Teacher performance can be improved into a better category and most effectively done from left to right illustrated in Figure 4. The biggest score gap was the teachers' ability to create such a challenging learning environment. The teaching variation was not able to explore the potential of students. Therefore, teachers need to improve the mastery of various learning approaches, especially the student-centered learning approach. The second weakness was the way to understand the students' characteristics, this was reflected in the potential development of students who were almost neglected as well as the way teachers facilitated the various students' needs with one same way. Those weaknesses were rarely admitted by the teacher but it can be revealed during the FGD, and this problem was mainly due to 24-hours per week of teaching obligation. It made the teacher had many classes as well as other administrative duties that had to be finished.

The next weakness was the evaluation of learning outcomes. Based on the data of 50 teachers, only 25 of them who analyzed instrument evaluation of learning outcomes. The analysis result of evaluation instrument of learning outcomes was not good in which 357 items categorized respectively into 34.2% of the bad category, 44.3% of the moderate category, 5.5% of good category and 16% asking for a revision. In FGD, the teachers acknowledged and expected to continue the cooperation with the university party to train them in preparing good instruments. The data of difficulty level showed that 61.9% was considered easy, 26.6% was moderate, and 11.5% was difficult with the

results of 68.1% fulfilling minimum completeness criteria, and 31.9% was not. It was less than satisfactory especially the quality of the test item. In the FGD session, it was revealed that the proportion of easy questions was the biggest and the reason was to save time in case of remedial tests. However, teachers were unaware that this action could decline the quality of educational standards. It also gave the students other problem in the following material since the material was coherently arranged in which the previous material underlay the following material. Besides, the advancement of technology, like Android, can bring bad effect on learning that distracts the students' attention during the learning process. By having so, the teachers expect to have the training to develop Android-based learning media.

The teachers' ability in utilizing learning media and resources was so normative that only a few teachers had been using internet facilities as learning media and resources. In this case, the principal acknowledged the limitation of internet facility was to make sure the usage related to the learning materials. Internet services for both learning and media were provided outside the classroom and accessible to students during school time. For the future, the school has planned the service of learning resource facilities and internet-based learning media so that all the information needed can be accessed by students under teacher supervision. In the FGD, it was revealed that the teacher expected to be able to use the internet for classroom learning as well as to provide Android-based tasks on the students to reduce the use of cell phones that were not relevant to the learning process.

Nevertheless, the teachers' understanding of curriculum implementation was good, it still needed to be improved because most of the teachers were just as an implementer so that rarely developing the existing syllabus. The same subject in the teaching group was poorly utilized to explore the needs of material development. Even, validation on the evaluation of learning outcomes was only for the administrative requirement. The results of instruments evaluation in FGD session had made the teachers aware of responding the instrument as a validator.

Another thing that should be improved is the teachers' ability in realizing the teaching design of lesson plan during the classroom learning. There were nearly 65% of inconsistent report between learning scenarios and lesson plan in which the learning process observed with the research instruments. The learning design was based on the Student-Centered Learning approach, but the learning procedure tended to be teacher-centered.

The positive point for the sustainable professional development is on the teachers' reflection. They did well to identify their weaknesses of teaching and the aspects to support the learning. The results of this identification were formulated into a teaching improvement strategy for the future. Most teachers had been able to relate the weaknesses, the strengths and the improvement of strategies plans though under the researcher's intensive mentoring. As an initial step and a new thing, this accomplishment has been encouraging. Based on the observation, the teachers seemed to be motivated to implement the teaching and competence development activities by referring to the standard competence that had been arranged by the researcher.

Teachers' responses related to the standard formulation of incremental teacher competency are aligned with the teachers' needs, and it has challenged the teachers to improve their competence to the highest level. The school principal considers the implementation of incremental competency has fostered a collaborative culture among teachers to support professional development. The principal hope this activity can be continued because the impact can support the school programs. Several dimensions of professional teacher work have not been covered in the

formulated competency standard. However, the consultant from the Education Quality Assurance Institution believed that this formula had covered the five dimensions of professional work as the core aspects. They support the implementation of incremental teacher competency standards and is ready to assist with a further consultation so that the evidence of teacher professional development activities can be the input for the credit score assessment.

It is concluded that only 80% of the research participant completed the tasks until the teaching accountability report. The implementation of the competency standard for professional work dimension 1 showed that the students' understanding was low and the teachers did not facilitate the students. Furthermore, the implementation of the competency standard for professional work dimension 2 indicated that only 50% of teachers could complete the evaluation result with instrument quality analysis. The analyzed instruments showed that only 5.6% in the good category, 34.2% and 44.3% of them were categorized as poor and moderate respectively. The proportion of difficulty level was 61.9% and 11.5% for easy and difficult categories with the results of 68.1% fulfilling minimum completeness criteria, and 31.9% did not.

Moreover, the implementation of competence standard for professional work dimension 3 revealed that the learning implementation was less challenging and teachers mostly still applied teacher-centered learning. In the professional work dimension 4, curriculum development still needed to be improved. All teachers were still implementing syllabi in the curriculum, not yet developed. Lastly, the implementation of competence standard for professional work dimension 5 showed that teachers involved in professional activities had been running well. The senior teacher appointed as the class coordinator of the action research team did as expected.

CONCLUSION

This study confirmed that the teachers, head principle and the Education Quality Assurance Institution, the standard formulation of incremental teacher competency are aligned with the teachers' needs to support school-based sustainable professionalism. The implementation of incremental teacher competency in the school has grown a collaborative culture among teachers to support professional development. Although the assessment result of incremental teacher competency in all aspects of the working dimension of professional teacher was categorized as good and very good, improvements need to be done for several areas namely (1) training on innovative learning to support implementation of competence standard for professional work dimension of 3, (2) training on making evaluation instruments of students learning outcomes to support implementation of competence standard for professional work dimension 2 and (3) understanding the students' characteristics and potential to to support implementation of competence standard for professional work dimension 1, and (4) training on media and learning resources-based android to support implementation of competence standard for professional work dimension of 3.

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