Soft Skills evaluation management in Learning processes at Vocational school

I Made Sudana¹, Delta Apriyani¹, Agus Suryanto¹
¹Universitas Negeri Semarang

Abstract. The high unemployment rate of vocational high school graduates, which is up to 9.27% of the 131.55 million productive age people, is the result of the weak evaluation of the learning process. This can happen because the learning system is still focused only on hard skills teaching (skills evaluation), and ignores evaluations related to soft skills, especially those that include evaluation of 4C (Creativity, Critical Thinking, Communication, and Collaboration). In this 4.0 revolutionary era with the digital-based work character, the government sought to improve the quality of vocational high school graduates by launching a policy on revitalizing vocational education. Currently, the quality of learning evaluation instruments in vocational high schools is still considered less valid so that it has not been able to evaluate aspects that are fully evaluated. Referring to eight national education standards, one of which is related to evaluation standards, it seems that there have not been many studies specifically and comprehensively, especially related to the 4C evaluation model. The purpose of this study is to develop a 4C evaluation management model in the productive learning of vocational high schools which the results can help succeeding the vocational high schools revitalization program. This study used the Research and Development (R & D) approach and for testing the effectiveness of the model, it used the project learning strategy (PjBL), which also used to produce a product that is a 4C evaluation management model. A test-shaped evaluation is used to measure cognitive domains (knowledge), while non-test to evaluate performance (performance test) is used to measure affective domains (attitudes) and psychomotor (skills).

Keywords: Management model, evaluation, 4C

1. Introduction
Evaluation is a very necessary in the teaching and learning process and it greatly determines the success of an organization. Learning evaluation is needed to be able to produce graduates who are acceptable by the working world, which currently increasingly require graduates who are highly competent to occupy certain jobs in the company. This is a challenge for Education Institution of Educational Practitioners (LPTK), particularly Vocational High Schools, to continually improve the learning quality so that they can meet the needs of the business and industry world and reduce the unemployment rate of LPTK graduates every year, especially for Vocational High School graduates. Moreover, students can be better prepared to face the business market competition because there are still many vocational graduates who do not meet the market needs [1][2] because currently, the Vocational High Schools cannot produce graduates solely based on the offer but they must also consider the demand [3]. The learning improvement must adjust the needs, where currently, the business and industrial world do not only need graduates who have good hard skills competencies, but the soft skills competencies as well. One good consideration for the business and industry world to
accept a worker is that the students must be able to keep up with the ever-changing developments in the working world [4][5].

The current problem is that the Vocational High Schools only focuses on the assessment of hard skills of the students. However, the assessment of soft skills, especially those that include evaluation of 4C (Creativity, Critical Thinking, Communication, and Collaboration) are still ignored by the teachers. In fact, a company will require a worker who also has good soft skills ability [6], thus the learning that only assesses the hard skill ability will not be able to help the students in developing their soft skills [7]. There needs an evaluation on this issue to fix the learning system of Vocational High Schools. One of the problems faced by the instructors is that they still have hard times in assessing the attitude criteria such as Creativity, Critical Thinking, Communication, and Collaboration which have different method from the way cognitive or psychomotor competency of students assessed, which can use tests as well as the results of students' skills shown in the learning process. There needs to be a assessment on the Vocational High School learning system in its teaching and learning process evaluation, particularly the management evaluation on students’ attitudes aspect. This study produces an evaluation of students’ attitudes aspect assessment management that can be used as evaluations for improvement and further learning.

2. Research Methodology
This study uses the R and D method, where the researcher observed the learning and assessment process in Vocational High Schools. The researcher also developed assessment instruments to assess the attitude aspect of the students including Creativity, Critical Thinking, Communication, and Collaboration. There was also a trial assessment using developed instruments for instructors to assess the attitude aspect in the teaching and learning process. The researcher conducted the assessment of results and observation from the use of the developed management evaluation instruments on the attitude aspects of the students in Vocational High Schools in the practical subject. Furthermore, there was also a test on the effectiveness of the model by using the project learning strategy (PjBL).

The subjects of this study were the teachers in Vocational High Schools on practical subjects and stakeholders which employ the graduates as well as the students themselves. The teachers were chosen as the subject because they will be the one who will use the research products, which are the assessment instruments on attitude aspects for Vocational High School (SMK) students. The stakeholders were chosen because they will be the users who understand the industry needs and who will use the graduates according to the competencies needed in the industry.

3. Discussion
Evaluation management is conducted to reduce the difficulty level for a teacher in providing assessment and evaluating the results of students’ soft skills based on the field’s needs. This study was conducted based on the initial observation on the teaching and learning activities that have lack of management of soft skill abilities assessment and lack of extra attention in developing soft skills abilities, in which soft skills play an important role for students to enter the current working world. Based on the weaknesses found in the initial observation of soft skills and their supports, which one of them is the students soft skills evaluation management, thus a supporting instrument is prepared to help teachers during the assessment process, as a tool to measure students’ soft skills including the 4C aspects (Creativity, Critical Thinking, Communication, and Collaboration).

The assessment instrument has gone through a validation process from experts to find out the shortcomings of the assessment evaluation management results that have been designed, which eventually reviewed by the stakeholders as the users of graduates and the ones who know the employment needs, as well as reviewed by the teachers as the ones who understand the characteristics of education which must be adapted to the applicable curriculum. Furthermore, the assessment instrument will be tested on students. Teachers will act as the assessors. It aims to result the effectiveness of assessment evaluation management as discussed in this case study.
The following are some assessment aspects that are used to assess the aspects of soft skills, especially those that include evaluation of 4C (Creativity, Critical Thinking, Communication, and Collaboration) that must be possessed by students, which are as follows:

**Tabel 1.** Assessment on Attitudes Aspects in the Learning of Attributes Schemethat needs to be developed

| No | STATEMENT |
|----|-----------|
| **Creativity**                  |
| 1.  | Able to build self-concept by recognizing self-talents |
| 2.  | Able to assess the level of self-development needs |
| 3.  | Able to motivate oneself to achieve the self-targets that have been set |
| 4.  | Students have the ability to develop self-creativity |
| **Critical Thinking**           |
| 5.  | Students know how to design the achievement of future self-targets |
| 6.  | Students have the ability to lead and think critically |
| 7.  | Develop self motivation and design achievement targets in academic and nonacademic fields |
| 8.  | Improve the ability to think critically in solving problems and finding the solutions |
| 9.  | Make completion plans and achievements in studies |
| **Communication**               |
| 10. | Students have the ability to build communication |
| 11. | Basic of leadership (initiative and responsibility, making decisions) |
| 12. | Students have the ability to convey information to others |
| 13. | Develop the ability to communicate with friends, teachers and others |
| **Collaboration**               |
| 14. | Students have the ability to adapt to their environment |
| 15. | Students have the ability to work together in teams |
| 16. | Students have the ability to establish interpersonal relationships |
| 17. | Students have the motivation to be active in the school organization activities |
| 18. | Students know various organizations for student activities |
| 19. | Students can accept various differences including not doing things related to bullying |
| 20. | Techniques to adapt to the environment, both inside and outside the school environment |
| 21. | Building cooperation in teams |
| 22. | Develop a social soul (helping and supporting those who are in need) |
| 23. | Improve work ethic, both academically and non-academically (discipline, diligence, hard work, thoroughness and totality) |

Description: Each point of the question has five choices of values consisting of the following
- **Point A**: If the score ranges from 81-100
- **Point B**: If the score ranges from 61-80
- **Point C**: If the score ranges from 41-60
- **Point D**: If the score ranges from 21-40
- **Point E**: If the score ranges from 0-20
Assessment is one important point in the teaching and learning process, which can be a measurement of a successful learning [8][9]. Assessment instruments help teachers to show the students’ abilities based on the aspects developed from the contents of the existing curriculum and the field needs based on the stakeholders’ input. Therefore, the teachers’ responses to the attitude aspect assessment management that consists of 4C (Creativity, Critical Thinking, Communication, and Collaboration) show an average of 87.5%, in which, the assessment tool is considered practical if 80% or more of respondents provide positive response [10].

4. Conclusion
Hard skills are no longer the only subject evaluated by the business and industry world in recruiting an employee. Nowadays, soft skills have also become a consideration for them to employ those who have balanced soft and hard skills. This is proven by the research results that show the affirmative statement of the users on the development of soft skills for students in schools, especially in Vocational High Schools. Therefore, there is a need to improve evaluation management particularly in evaluating students’ aspects mentioned above, based on input from educators and users.

5. References
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