

Comparison of Self-evaluation and Peer Evaluation with Assessment Lecturer Against Course Products Body Automotive at State University of Malang

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ABSTRAK

This research is to find out the results of self-evaluation, peer evaluation and lecturer evaluation of the results of the automotive body course. This study used a descriptive method with a quantitative approach and a cross-sectional research design. This research was conducted on 86 undergraduate students in Automotive Engineering class of 2019. The research sample was 25 undergraduate students in Automotive Engineering class of 2019. Subjects body automotive with an overall score of 76.25 for the subject class. The same evaluation with a total score of 75 for the expert class instructor's assessment of the results of the Autokor course product in the form of a miniature car is the score assessed by the expert group subject lecturer of 84. Comparison of self-evaluation and peer assessment and fact evaluation fall into the same category, namely competency category, where the average score of self-evaluation and peer evaluation is 76 and that of faculty evaluation is 84. In this study it was found that there is a similarity between self-evaluations. Peer evaluation and evaluation as well as faculty evaluation of product results subject body automotive.

Keywords: Self-assessment, Peer Assessment, Assessment, Body Automotive.

1. INTRODUCTION

Through self-assessment and peer assessment, students can participate in evaluations or assessments (self-assessment and peer assessment). Students evaluate their attitudes, knowledge, and abilities through selfassessment, which they do reflectively [1]. Peer assessment can be used by educators to enhance authentic and non-authentic assessments.

Activities for practicum play an important role in effective in-course teaching and learning. Aspects of student talent and how successful they are in using the knowledge learned during learning activities can be determined through practicum activities [2]. To evaluate student learning outcomes in practicum activities, the activities practicum is more often done [3].

The interview findings indicated that students did not participate in evaluation-related activities. The lack of student participation in evaluation activities due to time constraints is the cause. Students who are not involved in learning evaluation activities struggle to evaluate themselves and their friends [4]. In addition, students are not aware of the appropriate or relevant criteria for evaluating practicum products. Students' ability to think critically, honestly and objectively as well as their ability to provide feedback to other students can benefit from being included in the evaluation of the results of student practicum activities [5].

Assessment of student practicum products which are only carried out by educators has drawbacks. Among these deficiencies is the difficulty for educators to pay close attention to the results of practicum products for each student [6]. This distracts educators from evaluating the results of practicum products for some students. Because educators use more assessment in the form of tests, quizzes, or questions and answers, self-assessment and peer assessment in learning activities have not been widely used [7].

Educators play an important role in carrying out teaching and learning activities. As a result, alternative forms of assessment have to be developed and implemented. Self and peer assessment is an alternative

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form of assessment that can be used, especially in practicum activities [8]. Self-assessment has the advantage of giving students regularity in the learning process, enabling them to identify learning deficiencies [9]. This can be used to provide feedback to students to improve learning outcomes in the future. Because it has advantages self-assessment often combined withpeer assessment. Peer evaluation can assist in self-evaluation. Students gain knowledge to help their abilities by evaluating the work of their colleagues [10].

2. METHOD

The method used is descriptive method with a quantitative approach used in this study. condition or Phenomenon Peer and Self-Assessment in learning activities described in this study. Descriptive research method with a quantitative approach was chosen to describe or describe the work assessment of course students' body automotive using self-assessment and peer assessment for product results. The research population consisted of 53 students of the 2019 Batch of Automotive Engineering Education who had completed the course body automotive and has an automotive concentration. The sample is determined using a purposive sample, which is a sampling technique for data sources with certain considerations. This study used a sample of 20 people. Product evaluation instruments are used.

3. RESEARCH RESULT

Self-evaluation for the results of the automotive body course product in the form of miniature cars, he considered good, with an overall score of 76.25 in the closed category. With an overall score of 75 in the arranged category, peer assessment or peer assessment for the results of eye products taken by automotive bodies in the form of car miniatures is good. With an overall score of 84 in the sewn category, the lecturer's assessment of course product results body automotive in the form of miniature cars is quite good.

4. **DISCUSSION**

The results of calculations and data analysis carried out in this study showed that the self-assessment of the results of miniature car products obtained a score of 76.25 in the subject category. The results of the selfassessment were compared with the lecturer's assessment. In the evaluation of lecturers based on the results of calculations and data analysis carried out in this study, it can be seen that lecturer evaluations get 84 points in the subject category.

In the skilled categorypeer evaluation for the results of miniature car products gets a score of 75. The lecturer's assessment of the results of miniature car products gets a score of 84 in the skilled category. Comparing student assessments with lecturer assessments reveals students' ability to conduct peer assessments. In general, the comparison of product assessment results for coursesbody automotive in the form of miniature cars carried out by peer assessments and lecturer assessments have one thing in common, namely that all are classified as skilled [11]. For this assessment, peer assessment produces an average rating ofpeer and lecturers in the same category, namely the skilled category.

The lecturer's assessment of the results of miniature car products received an overall skill score of 84. The categories of assessment obtained were the assessment of the shape of car products with an assessment result of 84, an assessment of car paint and color products with an assessment result of 84, and an assessment result of 83. The assessment results lecturers obtained from one of the subject lecturersbody automotive. There are aspects that are assessed in the assessment, one of which is the aspect of evaluating course resultsbody automotive. The aspect that is considered and analyzed is the product aspect.

Overall, the calculations and data analysis carried out in this study aim to find out the results of self-evaluations and peer assessments compared to lecturer assessments for course productsbody automotive. The results of the assessment show that self-assessments and peer assessments are superior to lecturer assessments [12]. The results of miniature car products get a score of 84 in the skilled category for lecturer assessment and a score of 76 in the skilled category for self and peer assessments with lecturer assessments produces the same category, namely the skilled category.

The respective assessment criteria are car product form criteria, with a score of 74 for the entangled category for self- and peer-assessment, and 84 for the steep category for lecturer assessment. The paint and color criteria for the car resulted in a score of 73 in the fairly skilled category for self and peer evaluation. The lecturer rated 84 skills in the skilled category [13]. The final criterion is the completeness of the car product, which scores 80 for the skilled category for self and peer assessment and 83 for the combined category for lecturer assessment.

The consequences of this influential evaluation process can produce students who are more active, develop in learning activities, and grow into individuals who can reflect on themselves and their peers [14]-[16]. Results self-assessment and peer assessment for product results in courses body automotive proved to be the same as the lecturer's assessment with grades in the same category. Educators can use this research as one of the innovations and alternatives in the evaluation process.

5. CONCLUSION

The results of research conducted by researchers indicate that the average value of self-assessment and peer assessment is the same as the teacher's assessment so that it has a positive effect on assessment. Selfassessment and peer assessment are alternative assessments that can be used.

REFERENCE

- Zulharman, Self dan Peer Assessment sebagai Penilaian Formatif dan Sumatif. Yogyakarta: Fakultas Kedokteran, Universitas Gajah Mada, 2007.
- [2] S. R. Putra, Desain Evaluasi Belajar Berbasis Kinerja, Yogyakarta: DIVA Press, 2012.
- [3] Hariyanto and I. Basuki. Asesmen Pembelajaran, Bandung: PT. Remaja Rosdakarya, 2014.
- [4] G. T. L. Brown and L. R. Haris, The Future of Self-Assessment in Classroom practice: Referaming Self-Assessment as a Core Competency, Journal Frontline Learning Research, vol. 2 (1), 2014, pp. 22-30.
- [5] A. S. A. K. El-Koumy, Student Self-assessment in Higher Education: Alone or Plus?, Lebanon: Lebanese American University, 2010.
- [6] E. Wijayanti and Mundilarto, Pengembangan Instrumen Asesmen Diri dan Teman Sejawat Kompetensi Bidang Studi pada Mahasiswa, Jurnal penelitian dan Evaluasi Pendidikan, vol. 19 (2), 2015, pp. 129-144. DOI: 10.21831/pep.v19i2.5572.
- [7] M. Muslich, Pengembangan Model Assessment Afektif Berbasis Self-Assessment dan Peer Assessment di SMA Negeri 1 Kebomas, Jurnal Kebijakan dan Pengembangan Pendidikan, vol. 2
 (2), 2014, pp. 143-148. DOI: https://doi.org/10.1007/10722167_15.
- [8] B. Hamzah and S. Koni, Assessment Pembelajaran, Jakarta: PT Bumi Aksara, 2014.
- [9] A. A. Kusuma, W. Adi and Muhtar, Upaya Peningkatan Prestasi Belajar Mata Pelajaran Akutansi dengan Pendekatan Kooperatif Tipe Peer Assessment, Jurnal Pendidikan UNS, vol. 1 (3), 2013, pp. 1-13.
- [10] S. Muntasyir, Budiyono and B. Usodo, Eksperiment Model Pembelajaran Kooperatif Tipe Numbered Head Together (NHT) dengan Assessment for Learning (AFL) Melalui Penilaian Teman Sejawat pada Materi Persamaan Garis Ditinjau dari Kreativitas Belajar Matematika Siswa MTsN di

Kabupaten Sragen, Jurnal Elektronik Pembelajaran Matematika, vol. 2 (7), 2014, pp. 667-679.

- [11] Rochmiyati. Model Peer Assessment pada Pembelajaran Kolaboratif Elaborasi IPS Terpadu di Sekolah Menengah Pertama, Jurnal Penelitian dan Evaluasi Pendidikan, vol. 1 (2), 2013, pp. 333-346.
- [12] A. O. U. Onuka, Teacher-Initiated Student-Peer Assessment: A Means of Improving Learning-Assessment in Large Classes, International Journal of African & African American Studies, vol. 6 (1), 2007, pp. 18-24.
- [13] K. Harrison, J. O'Hara and G. McNamara, Re-Thinking Assessment: Self-and peer-Assessment as Drivers of Self-Direction in Learning, Eurasian Journal of Educational Research, vol. 60, 2010, hlm. 75-88. DOI: https://doi.org/10.14689/ejer.2015.60.5.
- [14] A. S. Fox-Alvarez, L. D. Hostnik, B. Conner and J. S. Watson, Development of a Formative Assessment Rubric for Peer Evaluation of Teaching (FARPET) and Pilot Use in Veterinary Online Teaching, Journal of Veterinary Medical Education, vol. 49 (6), 2021, pp. 693-698. DOI: https://doi.org/10.3138/jvme-2021-0015.
- [15] G.Toshkhujaeva, Peer Evaluation System in Education, International Conference on Developments in Education, 2022, pp. 82-84.
- [16] M. C. I. Péreza, J. Vidal-Pugaa and M. R. P. Juste, The Role of Self and Peer Assessment in Higher Education, Routedgle Taylor & Francis Group, vol. 47 (3), 2022, pp. 683-692. DOI: https://doi.org/10.1080/03075079.2020.17835261.

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