JVCE 11 (1) (2026) : xx-xx

Journal of Vocational Career Education

https://journal.unnes.ac.id/nju/index.php/jvce

Development of an Instructional Video on Sewing a Notched Collar Using the Project-Based Learning (PjBL) Model to Improve Student Pass Rates in the Sewing Operator Competency Test at BBPVP Semarang

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Article Info

Article History :
Received
November 2025
Accepted
January 2026
Published
July 2026

Keywords:
instructional video; ADDIE; competency test; fashion

Abstract

The Semarang Center for Vocational Training and Productivity (BBPVP Semarang) is a technical implementation unit under the Ministry of Manpower of the Republic of Indonesia, responsible for providing vocational training and competency certification. In 2024, the results of the Competency Test for the sewing operator scheme conducted by the Professional Certification Institute (LSP) P2 at BBPVP Semarang showed that out of 328 test participants, 77 students (23.48%) were declared Not Yet Competent. Field data indicate that the sewing operator scheme recorded one of the highest proportions of students in the Not Yet Competent category, suggesting a considerable gap between the expected competencies and the actual skills of students. Therefore, appropriate instructional media are needed to support student preparation for the Competency Test. Specifically, this study aims to: (1) develop an instructional video on sewing a notched-collar blouse that aligns with the sewing operator competency test scheme; (2) evaluate the feasibility of the instructional video; (3) assess its practicality; and (4) determine its effectiveness in improving student performance in the sewing operator competency test. This study employed a research and development approach using the ADDIE model (Analysis, Design, Development, Implementation, and Evaluation). Data analysis focused on evaluating the feasibility, practicality, and effectiveness of the developed video. The feasibility test results indicated that the video was categorized as very feasible. The practicality test showed a score of 0.7, classified as very practical. Furthermore, the effectiveness test produced an N-Gain value of 0.52%, indicating that the instructional video was effective. Based on these findings, it can be concluded that the developed video is highly feasible, highly practical, and effective in enhancing student competencies in preparation for the Sewing Operator Competency Test at BBPVP Semarang..

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p-ISSN 2339-0344
e-ISSN 2503-2305