Learning Strategies in Establishing Students' Welding Competency According to Industrial Standards

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ABSTRACT

Abstract. This research is a follow-up study of the roadmap that was made for three years, from 2019 to 2022. This research is the third stage of research with the aim of knowing learning strategies in shaping competencies according to industry standards. This research method is qualitative in the form of case studies to reveal deeper learning strategies that can form welding competencies according to industry standards, so that it can be revealed how learning strategies are applied, how learning methods are applied, how learning techniques are applied, how learning tactics are applied. , as well as several other factors related to students' learning of welding. The sample of this study used snowball sampling. The validity of the data in this study was tested by using the credibility test, transferability test, depandibility test, and confirmability test. The results showed that the learning strategy applied to the welding practice subject was a direct strategy by applying the mastery learning system. The learning strategy is carried out through three stages. The first stage is conditioning students to be ready to take lessons according to industrial conditions by: 1) layout the workshop according to industrial conditions, 2) displaying the results of welding work according to AWS (American Welding Society) standards, and 3) displaying teacher certificates in the welding workshop. The second stage is to train students according to industry standard training in the sequence: 1) Basic welding practice (making welding lines including connecting techniques) until they really master the competency of making welding lines, 2) Practice making T joints with positions 1F, 2F, 3F, and 4F, 3) The practice of making butt joints in 1G, 2G, 3G, 4G, 5G, and 6G positions. The third stage is welding competency certification through LSP P3 with welding positions: 1) 1F, 2F, 3F, 4F and 2) 1G, 2G, 3G.

Kata Kunci: *Keywords: strategy, learning, welding*