

Occupational Safety Preparedness and Awareness of Industrial Arts Students in Batangas Technical-Vocational Schools

Glen Rainer I. Quiestas¹, Lorna U. Dinglasan, Ed.D.¹
glenrainer.quiestas@deped.gov.ph
0009-0007-7986-925X

1 – Golden Gate College

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Abstract

Industrial Arts students in technical-vocational schools are exposed to workshop environments where occupational hazards and safety risks are common. Drawing from the researcher's experience as a TVL teacher, observations of varying student safety behaviors and workshop-related challenges highlighted the need to strengthen students' awareness and preparedness regarding occupational safety standards.

This study aimed to assess the level of awareness and preparedness of Industrial Arts students in Technical-Vocational schools in the Schools Division Office of Batangas Province regarding occupational safety standards. Specifically, it examined students' preparedness in terms of emergency response, use of safety equipment, and compliance with safety guidelines; awareness in hazard identification, risk assessment, and safety training and education; the relationship between awareness and preparedness; challenges encountered; and proposed enhancement activities.

A descriptive quantitative research design was employed among Grade 9 and 10 Industrial Arts students from selected technical-vocational schools in Batangas Province. Respondents were selected through stratified random sampling with proportionate allocation. Data were gathered using a validated researcher-made questionnaire and analyzed using frequency, percentage, weighted mean, ranking, and Pearson Product-Moment Correlation Coefficient.

Results revealed that students demonstrated a moderate level of preparedness in emergency response, use of safety equipment, and compliance with safety guidelines. Likewise, respondents exhibited a moderate level of awareness in hazard identification, risk assessment, and safety training and education. Findings further showed a significant positive relationship between awareness and preparedness ($p = .000$), indicating that increased awareness



corresponded with improved preparedness. Students also encountered slight challenges associated with limited safety resources, inadequate signage, and workshop conditions.

The findings suggest that strengthening occupational safety awareness contributes to improved student preparedness. Enhancement activities focused on emergency simulation, safety equipment monitoring, hazard identification, risk analysis, and environmental audits are recommended to further enhance occupational safety competence and promote safer learning environments.

Keywords: *occupational safety standards, awareness, preparedness, Industrial Arts students, technical-vocational education*