



## **PUBLIC SECONDARY SCIENCE TEACHERS' COMPETENCY IN UTILIZING LABORATORY EQUIPMENT AND TOOLS**

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This study aimed to develop a laboratory utilization of science equipment and tools intended for public secondary science teachers based on the level of competency and challenges encountered by the science teachers in a laboratory setting and in performing the said task. The quantitative method and descriptive type of research were applied in this study with a questionnaire via Google Form as the main data gathering instrument of responses by 107 public secondary science teachers of Congressional District II, Province of Batangas, during the school year 2024-2025.

Test of hypothesis revealed that there was a significant difference between the competency level of science teachers in the utilization of science equipment and tools and the respondent's age, highest educational attainment and level of seminars and trainings attended related to the utilization of science laboratory equipment and tools, while respondents' sex and years of teaching experience have no significant difference in the level of competency of science teachers in the utilization of science equipment and tools. And lastly, it is concluded that there is no significant relationship between science teachers' competency in using laboratory equipment and tools and the challenges they encountered in performing these tasks.

Based on the findings and conclusion of the study, it was recommended that teachers themselves should look and provide adequate attention to indicators that received the lowest weighted means in all variables. The Department of Education and school administrators should provide training and seminars for teachers that aim to improve the level of competency of teachers in utilizing laboratory materials, and the designed laboratory utilization guide should be carefully studied by the teachers, department heads, and administrators before its implementation.

*Key Words: laboratory utilization guide, science teacher's competency, laboratory equipment and tools, utilization challenges, laboratory settings*

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