



A SCIENCE TEACHER'S PCK IN CLASSES WITH DIFFERENT ACADEMIC SUCCESS LEVELS

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Abstract

Teachers are usually considered to be the most essential elements in student learning. Teachers' Pedagogical Content Knowledge (PCK), whether pre-service or in-service, is one of the most important factors that affect learning process. The purpose of the study is to investigate an experienced science and technology teacher's PCK on the topic of fluid pressure in physics in two classes with different academic success levels at an elementary public school. The study can be defined as a qualitative case study. Purposeful sampling method was used to explore an elementary science and technology teacher's PCK. Timeline for the data collection is divided into three parts; conducting pre-interview, classroom observations, and conducting post interview. All the interviews and audio recordings of the classes were transcribed verbatim. To establish inter-rater reliability of the data analysis, pre-interview transcriptions were coded by three researchers independently. The rate of agreement on the coding results between three researchers was found as 85%. The results of this study showed that the participant teacher was knowledgeable about the goals and objectives of the science curriculum, students' prior knowledge, and what the students will learn in future regarding the liquid pressure topic.

Key Words: Pedagogic content knowledge, Science teacher, Fluid pressure.