SUBJECT MATTER KNOWLEDGE FOR TEACHING

STATISTICAL ASSOCIATION

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This study sought to describe the subject matter knowledge needed for teaching statistical association at the secondary level. Taking a practice-based approach, three teachers were observed as they taught statistical association with an analytical focus on the demands upon teachers’ subject matter knowledge involved in the practice of teaching. Following each observation, an interview was conducted with the teacher to discuss the subject matter knowledge used to teach the observed class session. Records of practice, including observation transcripts, interview transcripts, handouts, textbook pages, teacher’s guide pages, and copies of student work, were assembled to create a compilation document for each of the observed class sessions. Through analysis of the compilation documents by the researcher and additional analysis by a statistician and a statistics education expert, a detailed description of the subject matter knowledge needed for teaching statistical association was created.