

Applying Results of Statistics Education Research to Teaching Statistics in Irish Primary Schools

Finbarr C. Sloane, Aisling M. Leavy

In this research paper we explore the relationship between pre-service teachers' secondary mathematics scores and their readiness for teaching the new data analysis curriculum in Irish primary schools. Next we explore the leaving certificate items and the procedural responses they evoke. We examine student teacher conceptual understandings and the gaps between these understandings and their procedural knowledge as indexed in their secondary school results. Finally, we explore and test a curricular model to bridge this gap in the practice of instruction.

Keywords: Conceptual knowledge; Procedural knowledge; Lesson Study

Biography: Dr. Sloane is the Associate Dean for Research and Chair of Mathematics Education in the School of Education at the University of Colorado at Boulder. Dr. Leavy is a Lecturer in Mathematics Education at Mary Immaculate College of Education, Limerick, Ireland. Sloane has been a program director at the US National Science Foundation. Both have conducted research in mathematics and statistics education in the US and in the Republic of Ireland. Their research work can be in outlets like the *Statistics Education Research Journal*, *ICOTS-8 Proceedings*, the *Journal for Research Mathematics Education*, *Mathematics Teacher Education* to name but a few.