

LAUNCHING A STATISTICAL ENQUIRY: POSING STATISTICALLY WORTHWHILE QUESTIONS

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A recent approach to statistics education is situating the teaching and learning of statistics within cycles of statistical inquiry. Learners pose questions, plan and collect data, represent, analyse and interpret data. We focus on the first step – the preparation of prospective teachers to pose statistical questions. Posing worthwhile statistical questions is a critical step as they inform the types of data collected, determine the representations used and influence the interpretations that can be made. We report on an investigation of prospective elementary teachers in Ireland (n=200) and Germany (n=50) as they design statistical questions. Support was provided through tutorials, peer-feedback and expert-feedback. We describe the features of statistical questions posed, identify obstacles and difficulties experienced and evaluate the effectiveness of both peer and expert feedback.