

教育科學研究期刊 第五十五卷第三期

2010 年, 55 (3), 1-32

以敘說探究探討一位國中教師 發展數學探究教學之信念與實務

林勇吉

國立彰化師範大學科學教育研究所
研究生

秦爾聰

國立彰化師範大學科學教育研究所
助理教授

段曉林

國立彰化師範大學科學教育研究所
教授

摘要

本研究旨在透過敘說取向個案研究，描述 1 位國中教師發展數學探究教學的故事。利用「訪談」、「課室觀察錄影」、「研究群會議錄影」、「教師」與「研究者」反思筆記獲得研究資料，進行「敘說分析」，以整體描繪其信念與實務的改變。研究發現，個案教師初期的信念與實務立基於過去學習經驗與家人的影響；在專業成長活動中，透過文獻閱讀、觀摩資深教師教學、反思課室實務、與同儕間的互動與討論，促進了個案教師改變這些信念與實務。

關鍵字：信念、敘說、實務、數學探究

高 等 教 育

Journal of Research in Education Sciences
2010, 55(3), 1-32

Utilization of a Narrative Approach Case Study to Investigate the Implementation of Mathematics Inquiry Teaching

Yung-Chi Lin

Graduate Institute of Science Education,
National Changhua University of Education
Graduate Student

Erh-Tsung Chin

Graduate Institute of Science Education,
National Changhua University of Education
Assistant Professor

Hsiao-Lin Tuan

Graduate Institute of Science Education,
National Changhua University of Education
Professor

Abstract

The purpose of this study was to use a narrative approach to investigate the process undertaken by a mathematics teacher as she implemented a mathematics inquiry teaching program. Data collection methods included unstructured interviews, videotaped classroom observations, videotaped group meetings, and the teacher's and researcher's reflective notes. By means of a narrative analysis, an emplotment was developed to depict changes in the teacher's beliefs and practices. The research findings showed that the teacher's initial beliefs and practices were founded upon her former learning experiences and the influence of her family. Participation in the activities of a professional development research group, which included reviewing recent literature, inspecting and learning from an exemplary teacher's instruction, reflecting on each other's videotaped classroom teaching, and interacting with peers, seemed to encourage the case teacher to change her beliefs and practices.

Keywords: beliefs, narrative, practices, mathematical inquiry