

In Their Words, Through Their Eyes:  
Novice Teachers Reflect on Teaching and Their  
Preservice Education

by

**James Edward Heath, B. A.; M. A.**

**Dissertation**

Presented to the Faculty of the Graduate School of

The University of Texas at Austin

in Partial Fulfillment

of the Requirements

for the Degree of

**Doctor of Philosophy**

The University of Texas at Austin

December 2005

## Dedications

I dedicate this work to my parents,

James Edward Heath, sr.

And

Thelma Neely Heath

Though possessed of little education themselves,  
they never ceased to encourage and support me at every step of  
this long journey.

For that, I am eternally grateful.

I only wish they could have lived to see the journey's completion.

## Acknowledgments

This work would not have been possible without the contributions of the student teachers who so graciously volunteered their time, energy, opinions, and feelings during the course of this research. They will always have my gratitude, and I hope that I was able to help them in some way in return.

Also, this work (along with many other aspects of my life) would not have been possible without the encouragement, advice, and love of my wonderful wife, Margaret. She has been my diagrammer, sounding board, proofreader, and much-needed “reality check.” She remains, in every sense of the word, my inspiration.

**In Their Words, Through Their Eyes: Novice Teachers Reflect on  
Teaching and Their Preservice Education**

Publication No. \_\_\_\_\_

James Edward Heath, Ph.D.  
The University of Texas at Austin, 2005

Supervisor: James P. Barufaldi

In recent years, cries for reform in science teacher education have come from many directions. Teachers often leave the profession after a few years, and the teachers that stay are perceived as insufficiently prepared for the challenges they will face. One pervasive problem is that teachers themselves are rarely consulted in efforts to reform science teacher education. This study is an attempt to address that lack of input, by investigating the “lived reality” of prospective science teachers and trying to see the process through their eyes, to discover what they wanted and needed from their teacher preparation program, and to assess how well their preservice program met those needs.

During the semester of their student teaching, six prospective teachers were asked questions about their experiences and asked to reflect on their preservice education. The researcher continued to follow the progress of one of the cohort members through his first year as a full-time teacher with a series of interviews. The study revealed a number of skills and attitudes that the student teachers felt were essential to their success: a sense of “caring,” classroom management skills, organizational skills, and science content knowledge. Unfortunately, the study also reveals that the student teachers also felt that their preservice education did very little to help meet these needs. Also disturbing was

the fact that all but one of the student teachers had bad experiences with their cooperating host teachers.

The study makes a number of suggestions for improving teacher preparation. Field experiences need to be frequent, and varied, with extensive opportunities for reflection on those experiences. Also, teacher education programs should more closely integrate the three elements of preservice education: extensive field experiences, courses in education theory, and courses in science content. Student teachers need at least one mentor who is dedicated to their success, and is not in a position to evaluate them. The results of this study should provide affirmation to innovative teacher preparation programs, such as the UTeach Program at the University of Texas at Austin.

## TABLE OF CONTENTS

List of Figures	x
Chapter 1 – The Problem	
Introduction	1
Background	3
Statement of the problem	3
Purpose of the study	4
Research questions to be answered	5
Hypotheses/Objectives	5
Assumptions	6
Rationale/Theoretical base	7
Importance of study	10
Definition of terms	11
Delimitations	11
Chapter 2 – Review of Related Literature	
The "reality shock" of beginning teachers	13
Assessments of teachers' needs	16
Assessments of the effectiveness of preservice education	24
New approaches to teacher education	39
The current study	49
Chapter 3 – Procedures	
Research approach	50
Research design	
Small group study	
Context of the Study	50
Sample Population	51
Data Collection Procedures	52
Data Analysis Procedures	54
Focused naturalistic study	
Sample Population	58
Data Collection Procedures	58
Data Analysis Procedures	59
Theoretical basis for qualitative study	60
Steps to insure the quality of the study	62
"Trustworthiness"	62
"Authenticity"	66
"Ethical Integrity"	66
Assumptions and limitations of the research paradigm	68

Chapter 4 – Results	
Small Group Study	71
Student Teacher #1: “Lisa”	83
Student Teacher #2: “Amy”	101
Student Teacher #3: “Joy”	117
Student Teacher #4: “James”	135
Student Teacher #5: “Derek”	150
Student Teacher #6: “Becky”	182
Common Threads	202
Focused Study with “Derek”	213
Chapter 5 – Conclusions and Discussion	
Was there a “reality shock” for the teachers in the study?	275
What are the needs of the student teachers in the study? How well did their preservice education provide for those needs?	278
Suggestions for improving teacher education	294
Suggestions for future research	301
Appendices	
Appendix A – Cover letter for first part of small group study	304
Appendix B – Cover letter for second part of small group study	305
Appendix C – Cover letter for focused qualitative study	306
Appendix D – Person as Instrument Statement	307
References	309
Vita	318

## **LIST OF FIGURES**

Figure 1 – Process for data generation in the small group study	56
Figure 2 – Process of analysis and synthesis for small group study	57
Figure 3 – Integration of the elements of the preservice education triad	298



