CONSTRUCTIVIST TEACHING STRATEGIES

ABOUT THE EDITORS

Jessie Brown, Associate Professor in the College of Education at Coastal Carolina University, supervises student teachers and teaches courses in language arts, social studies, and methods and curriculum in the graduate and undergraduate programs. She received her Ed.D. in elementary education, specializing in early childhood education, from Indiana University at Bloomington.

Previously, Dr. Brown was Director of Field Services, and was recently named Director of NCATE and Title II. She was an elementary school teacher for five years and a principal for eight years.

Dr. Brown has presented numerous papers at national conferences, such as ASCD, ATE, IRA, NAEYC, and SECA. She has published in *The Reading Teacher, Journal of Teacher Education*, and *Southern Regional Association of Teacher Education Journal*. Currently she has publications in press by NAEYC and Phi Delta Kappa.

Arlene Adams, Associate Professor in the College of Education at Coastal Carolina University, teaches graduate and undergraduate courses in literacy and learning disabilities. She received her Ph.D. in reading from SUNY Albany, and has degrees in learning disabilities and elementary education. She taught learning disabled children for six years before entering higher education.

Dr. Adams has presented research in literacy and teaching at numerous conferences, and published articles in Journal of Teacher Education, Remedial and Special Education (RASE), Southern Regional Association of Teacher Education Journal, and Teacher Education Journal of South Carolina. Her textbook, Handbook for Literacy Tutors, was published in 1999.

CONSTRUCTIVIST TEACHING STRATEGIES

Projects in Teacher Education

By

JESSIE C. BROWN, ED.D.

Associate Professor Elementary and Early Childhood Education Coastal Carolina University Conway, South Carolina

and

ARLENE ADAMS, Ph.D.

Associate Professor Elementary and Early Childhood Education Coastal Carolina University Conway, South Carolina



Published and Distributed Throughout the World by

CHARLES C THOMAS • PUBLISHER, LTD. 2600 South First Street Springfield, Illinois 62704

This book is protected by copyright. No part of it may be reproduced in any manner without written permission from the publisher.

©2001 by CHARLES C THOMAS • PUBLISHER, LTD.

ISBN 0-398-07221-3 (hard) ISBN 0-398-07222-1 (paper)

Library of Congress Catalog Card Number: 2001033608

With THOMAS BOOKS careful attention is given to all details of manufacturing and design. It is the Publisher's desire to present books that are satisfactory as to their physical qualities and artistic possibilities and appropriate for their particular use. THOMAS BOOKS will be true to those laws of quality that assure a good name and good will.

> Printed in the United States of America CR-R-3

Library of Congress Cataloging-in-Publication Data

Constructivist teaching strategies : projects in teacher education / edited by Jessie C. Brown and Arlene Adams.

p. cm.

Includes bibliographical references and index.

ISBN 0-398-07221-3 (hard) -- ISBN 0-398-07222-1 (pbk.)

1. Constructivism (Education) 2. Teaching. 3. Teachers-Training of. I. Brown, Jessie C. II. Adams, Arlene.

LB 1590.3 .C679 2001 372.1102--dc21

2001033608

CONTRIBUTORS

ARLENE ADAMS, Ph.D.

Associate Professor of Elementary and Early Childhood Education Coastal Carolina University Conway, South Carolina

JESSIE C. BROWN, Ed.D.

Associate Professor of Elementary and Early Childhood Education Coastal Carolina University Conway, South Carolina

KAREN CARPENTER, Ph.D.

Foundations of Education Associate Professor (Retired) Coastal Carolina University Conway, South Carolina

BETTEJIM CATES, Ph.D.

Elementary and Early Childhood Education Assistant Professor Baptist Houston University Houston, Texas

JOHN LAUT, Ph.D.

Elementary and Early Childhood Education Assistant Professor Coastal Carolina University Conway, South Carolina

JIM R. ROGERS, M.Ed.

Parent Education Parent Education Specialist Center for Education and Community Coastal Carolina University Conway, South Carolina

DOUGLAS W. SMITH, Ph.D.

Elementary and Early Childhood Education Assistant Professor Coastal Carolina University Conway, South Carolina

SHARON THOMPSON, ED.D.

Health Promotion Associate Professor Coastal Carolina University Conway, South Carolina

PREFACE

Here at the Coastal Carolina University College of Education, the teacher education program has evolved over the course of years and has endured changes in personnel, curriculum, and policies. The personnel changes have included the addition of a number of new faculty members with a broad variety of specializations, and the retirement or relocation of others. Three of the more influential curriculum and policy modifications made in our program have resulted from the following changes at the state level: The state's move towards accountability and its standards-based curriculum and assessments requirements; impending changes in state certification requirements; and the state's requirement of NCATE (National Council for Accreditation of Teacher Education) accreditation of its teacher education programs, in tandem with the establishment of its new teacher performance review system.

As we progressed through these changes, we experienced both the discomforts that changes inspire, as it relates to personnel, curriculum and policy changes; and also the elation that arises from meeting such new challenges. In the process, we found that we could make great improvements in the program through clarifying our goals and then adapting the curriculum to better meet those goals.

We found that our goals centered on these things: the development of reflective practitioners through constructivist teaching methods, the implementation of a research-based curriculum, and the translation of theory into practice.

One of the first steps taken was to survey principals, as we wanted to be certain we were meeting the needs of the school districts in our service area. In other words, we wanted to know what knowledge, skills and dispositions principals expected our graduates to have upon their entry into the classroom as paid employees. At the same time, it was important to us that we both model and advocate exemplary teaching practices.

We reviewed the data that we received from the principals and examined our practice as it existed at the time. For example, we had been told that some institutions were very deliberate in teaching their preservice teachers good interviewing skills. In our survey, we asked how important it was that our preservice teachers interview well. Through the survey, they informed us that while it was important, they felt that it was *more* important that they be able to apply their knowledge of child development and learning principles, and that they know the content and be able to teach appropriate content to their learners using a broad spectrum of teaching strategies. They also wanted their beginning teachers to be able to manage the classroom; work well with each other, parents and diverse learners; to be able to integrate the curriculum; and use technology effectively.

So we looked at what the principals wanted from our graduates, and we looked at what we had in place already—those activities that would enable us to prepare our preservice teachers effectively for their future classrooms. We discovered that most of the projects in this book were already present in some form in the program.

During this period, we also compiled the research that undergirds the projects. We sought research support for the use of the particular projects, and evidence that each represented exemplary practice. The state standards and school district guidelines were perused to be sure that the projects addressed them adequately. Where necessary, elements were added that improved the projects' applicability to the standards and guidelines.

Our final step was to coordinate the projects with the NCATE standards, making sure that they did in fact exemplify our conceptual framework. During our self-study it was gratifying to discover that there was little we had to add to the program to demonstrate that we were in compliance with NCATE requirements. As we included the project requirements in our syllabi and explained them to each other and to the NCATE examiners-verbally or in writing, the basis for this book was laid down.

We expect that the projects in this book will continue to evolve with the changing needs of our preservice teachers and service area. Too, our projects will reflect the changes made in our elementary and early childhood education programs as a result of new standards being set forth by learned societies, such as the National Association for the Education of Young Children (NAEYC) and the National Council of the Teachers of Mathematics (NCTM). And we will continue to study our program and make changes as we demonstrate our compliance with state and NCATE 2000 standards.

Chapters One and Two assist preservice teachers in constructing knowledge about their learners, and learn how best to teach them. Chapter Three provides instruction on how to create an optimal learning environment that will enable preservice teachers to facilitate quality instruction. Chapters Four, Five, Six, and Seven provide opportunities for preservice teachers to construct and apply their knowledge of learners through projects that require them to demonstrate effective planning, teaching and/or assessment procedures. Chapters Eight and Nine assist preservice teachers in constructing

Preface

knowledge of how to work effectively with parents and how to provide service to the school and community, respectively. Finally, in Chapters Ten and Eleven, the project activities, serving as standards-based assessments, enable preservice teachers to discover that their portfolios and other projects shared (many described in this book) at the senior festival enable them to demonstrate to themselves and to others what they know and are able to do. In effect, these project activities provide preservice teachers with concrete ways to practice the skills of the "reflective practitioner," as they think about their strengths and weaknesses at this level in their professional preparations.

It is our sincere hope that preservice teachers and their professors find these projects useful and valuable in the development of the preservice teachers' instructional expertise.

> Jessie C. Brown Arlene Adams

CONTENTS

.

| | | | | | F | Page |
|---------|---------|-------------|------|------|------|------|
| Preface | • • • • | • • • • | •••• | | | vii |

Chapter

| 1. | WRITING CASE STUDIES: CONSTRUCTING AN |
|----|---|
| | UNDERSTANDING OF STUDENT AND CLASSROOM 3 |
| | Bettejim Cates |
| | Introduction |
| | The Classroom as a Case |
| | The Student as a Case |
| | A Case Study Example |
| | A Final Word |
| | References |
| | Appendix A |
| | Appendix B |
| | Appendix C |
| | |
| 2. | EDUCATING CHILDREN WHO ARE RACIAL AND |
| 2. | EDUCATING CHILDREN WHO ARE RACIAL AND ETHNIC MINORITIES |
| 2. | |
| 2. | ETHNIC MINORITIES |
| 2. | ETHNIC MINORITIES |
| 2. | ETHNIC MINORITIES |
| 2. | ETHNIC MINORITIES26Jessie Brown26Introduction26What is Culture?28Assisting Preservice Teachers to Construct Knowledge about |
| 2. | ETHNIC MINORITIES26Jessie Brown26Introduction26What is Culture?28Assisting Preservice Teachers to Construct Knowledge about Teaching Racial and Ethnic Minority Students28 |
| 2. | ETHNIC MINORITIES26Jessie Brown26Introduction26What is Culture?28Assisting Preservice Teachers to Construct Knowledge about Teaching Racial and Ethnic Minority Students28The Project39 |
| 2. | ETHNIC MINORITIES26Jessie Brown26Introduction26What is Culture?28Assisting Preservice Teachers to Construct Knowledge about Teaching Racial and Ethnic Minority Students28The Project39Project Example40 |
| 2. | ETHNIC MINORITIES26Jessie Brown26Introduction26What is Culture?28Assisting Preservice Teachers to Construct Knowledge about Teaching Racial and Ethnic Minority Students28The Project39Project Example40A Final Word44 |
| 2. | ETHNIC MINORITIES26Jessie Brown26Introduction26What is Culture?28Assisting Preservice Teachers to Construct Knowledge about Teaching Racial and Ethnic Minority Students28The Project39Project Example40 |

| 3. | USING PREVENTATIVE CLASSROOM | |
|----|---|------|
| | MANAGEMENT STRATEGIES TO CREATE A | |
| | PRODUCTIVE ENVIRONMENT FOR LEARNING | . 48 |
| | John Laut | 10 |
| | Introduction | |
| | Goal of the Chapter | |
| | Preventative Management | |
| | Structuring Time (Schedules) | |
| | Transitions | |
| | Establishing Classroom Rules | |
| | Group Dynamics | |
| | Monitoring and Maintaining Child Behavior | |
| | A Final Word | 61 |
| | References | |
| | Appendix A | |
| | Appendix B | |
| | | |
| 4. | INTEGRATED INSTRUCTIONAL UNITS: TEACHING | |
| | FOR THE REAL WORLD | . 71 |
| | Arlene Adams | |
| | Introduction | |
| | Why Use Integrated Instructional Units? | |
| | Are Integrated Instructional Units the Only Way? | . 75 |
| | Are Integrated Instruction Units Difficult to Develop? | . 75 |
| | How the Units are Used in This Course | |
| | Steps in Unit Planning | |
| | References | |
| | Student Examples | |
| | Student Examples | . 07 |
| 5. | THE LEARNING CENTER: A PLACE FOR CHILD- | |
| | CENTERED INSTRUCTION | . 95 |
| | Jessie Brown | |
| | Introduction | . 95 |
| | Benefits of Using Learning Centers | . 96 |
| | The Learning Center as a Place to Individualize Instruction | . 96 |
| | The Learning Center as a Place to Integrate the Curriculum | . 97 |
| | Kinds and Functions of Learning Centers | . 98 |
| | Learning Center Activities | |
| | The Learning Center Project | 103 |
| | A Final Word | 107 |
| | References | |
| | Appendix A | |
| | Appendix B | 113 |

xii

| 6. | LITERATURE SETS: A TOOL FOR LITERATURE- BASED INSTRUCTION | 190 |
|----|--|-----|
| | Arlene Adams | 120 |
| | Introduction | 120 |
| | Why Use Children's Literature | 120 |
| | Rationale for Uses of Literature Sets | 122 |
| | The Literature Set Project | |
| | A Final Word | |
| | References | |
| | Student Literature Set Example: Sea Life–The Ocean | 128 |
| 7. | THE INTERNET AND CHILDREN: AN EXERCISE IN USING TECHNOLOGY IN THE ELEMENTARY | |
| | SCHOOL CLASSROOM | 133 |
| | Doug Smith | |
| | Introduction | 133 |
| | Brief History of the Internet | 133 |
| | Teachers and the Internet | 134 |
| | The Internet Project Assignment | |
| | A Final Word | |
| | Nelefences | 143 |
| 8. | BUILDING SUCCESSFUL PARTNERSHIPS WITH | |
| | FAMILIES: THE PARENT INVOLVEMENT PROJECT Jim Rogers | 144 |
| | Introduction | 144 |
| | A Little History of Parental Involvement in the Schools | |
| | Benefits of Involving Parents in the Schools | 145 |
| | The Effect of Family on How Children Learn | 146 |
| | The Effect of Teachers on How Children Learn | |
| | Support for Teachers in School and Home Partnerships | |
| | Support for Teacher Training in Home and School Partnerships | |
| | Defining Parent Involvement Today | 151 |
| | Critical Components of Teacher Effectiveness in Connecting with Parents | |
| | A Plan for Building Partnerships: The Parent Involvement | 154 |
| | Project | 166 |
| | A Final Word | 170 |
| | References | |
| | Appendix | |
| | | |

Contents

1

xiii

| 9. | SERVICE LEARNING: MEETING THE NEEDS OF |
|-------|---|
| | CHILDREN AND COMMUNITY 177 |
| | Sharon Thompson and Karen Carpenter |
| | Introduction |
| | Service Learning Defined 177 |
| | Why Service Learning? 178 |
| | Administrative Support is Important |
| | Essential Ingredients |
| | Three Levels of Involvement |
| | Four Simple Steps |
| | The Service Learning Curriculum |
| | The Service Learning Assignment |
| | A Final Word |
| | References |
| | |
| 10. | THE PORTFOLIO: DEMONSTRATING WHAT YOU |
| | KNOW AND WHAT YOU CAN DO 188 |
| | Jessie Brown and Arlene Adams |
| | Introduction |
| | What is a Portfolio? 188 |
| | Benefits of Using Portfolios |
| | When Can Portfolio Assessments Be Most Constructively Used? 190 |
| | Ways to Structure Portfolios 191 |
| | Organizing the Portfolio 191 |
| | The Portfolio Assignment |
| | Presentation Portfolio Example |
| | A Final Word |
| | References |
| | |
| 11. | SHOWING AND TELLING ABOUT WHAT YOU KNOW |
| | AND CAN DO: THE SENIOR FESTIVAL |
| | Arlene Adams and Jessie Brown |
| | Introduction |
| | Benefits of the Senior Festival |
| | Steps for Planning the Senior Festival |
| | A Final Word |
| | References |
| Inda | x |
| inue. | * |

xiv

CONSTRUCTIVIST TEACHING STRATEGIES

-

.

Chapter 1

WRITING CASE STUDIES: CONSTRUCTING AN UNDERSTANDING OF STUDENT AND CLASSROOM

BETTEJIM CATES

INTRODUCTION

URING THE PAST FEW YEARS, it has Decome increasingly clear that prospective teachers need to have many varied experiences in the classroom prior to their student teaching experiences. Within our program, our preservice teachers have an opportunity to become familiar with techniques and procedures for studying both the teaching/learning situation and the individual child. In a two-part project, preservice teachers are first required to treat the classroom as a case, investigating the classroom's demographics, resources, social interaction, and management policies; and secondly, they are required to study one individual child, looking specifically at developmental characteristics. This chapter will first discuss the constructivist philosophy behind this project, then the benefits of such a project. It will proceed to outline the directions for each portion of the project as well as suggestions for classroom instruction. The chapter will close with an example of one preservice teacher's project.

A Constructivist Approach

This project has as its underlying philosophy, constructivism. Constructivism is a view of learning that sees learners as active participants who construct their own understandings of the world around them. Using past experience and knowledge, learners make sense of the new information that they are receiving. This view is at the core of constructivism (Eggen & Kauchak, 1997). While putting together the case study, preservice teachers will be facing new situations and making sense of those situations based on prior knowledge of developmental theory. Constructivism strongly emphasizes this link between prior knowledge and new knowledge.

In addition to the active nature of the learner, constructivism also asserts that meaningful learning occurs within an authentic situation with authentic learning tasks. Being in the classroom is as authentic as we can get with future teachers. The case study project places them in the classroom for approximately 30 hours, collecting information and assisting the cooperating teacher. Learning will be more powerful and enduring because of the authentic situation.

The constructivist approach also includes a social component. In constructivist theory, learning is facilitated through social interaction, shared thought, and decision-making (Eggen & Kauchak, 1997). Throughout this project, the preservice teacher will be expected to communicate with the cooperating teacher, the children in the placement classroom, and fellow preservice teachers in the college classroom. Interviews with the cooperating teacher are crucial to the understanding of the classroom as a whole and the child chosen as the individual case. In addition, talking with fellow preservice teachers about their experiences and comparing children and classrooms will give each preservice teacher a better overall picture of classrooms, teachers, and children.

Benefits of Writing a Case Study

Historically, case studies as a research methodology have been used in clinical situations, although in more recent years, educational researchers have begun to use them more extensively (Schloss & Smith, 1999). Schloss and Smith (1999) state that case studies "allow you to focus on a single instance of a current phenomenon in its total context" (p. 87). The researcher can observe events as they occur and then interview those who participate in those events. Case studies typically involve multiple data sources including interviews with participants, direct observation, and analysis (Schloss & Smith, 1999). A case study provides an in-depth description of an individual (Brown, Cozby, Kee, & Worden, 1999). This individual is usually a person, but not always. It can also refer to a school, neighborhood, or business.

In the field of education, case studies

have been used both as a research tool and as an instructional tool. Research has shown that using case studies in instruction is beneficial to future teachers (Allen, 1995). Studying cases allows the preservice teacher to look at things from several different perspectives and to look at several possible meanings for events. It also requires that those future teachers use evidence within the case to support their conclusions. Eggen & Kauchak (1997) agree that the use of case studies in teaching can be powerful. They are real and they stimulate thought and decision-making. If teacher preparation courses can benefit from the use of case studies in instruction, then it makes sense that writing one's own case will be just as beneficial, if not more so.

This chapter outlines a case study project that gives preservice teachers an opportunity to gather information, organize that information, and use it to draw conclusions. This project will be challenging, but it will give the preservice teacher an opportunity to collect and analyze data, draw conclusions, and make decisions-processes that we go through daily as teachers. The case study project also requires preservice teachers to support those conclusions with data that they have collected. It is extremely important that these future teachers begin to connect theory to practice. Completing the case study, and answering the question "Why?" will help them to do that.

THE CLASSROOM AS A CASE

When our preservice teachers enter a classroom for the first time, we ask that they look around, see what is available, and generally get acquainted with the children and the situation. The beginning step in this case study is to collect data. Case studies involve using data that are obtained from written

records, interviews, and sometimes naturalistic observation (Brown et al., 1999). This project includes all of those data sources. Preservice teachers will collect data in four areas: demographics, resources, social interaction, and classroom management. Once the data are collected, they are then organized, analyzed, and reported. This section of the chapter will take each of these four parts separately.

Classroom Demographics

It is important to become familiar with the classroom setting as well as the children. This portion of the case study requires collecting information on the children themselves. The data for this section come from both interviews with the teacher and a selfreport instrument completed by the children. Preservice teachers should meet with their cooperating teachers and gather the following information about the class:

- 1. Subject and grade level
- 2. Number of students (broken down into male and female)
- 3. Information about student population: data regarding diversity, family structure, and general information about socioeconomic status as a group.
- 4. Information concerning instructional groups: number of reading groups, number of math groups, and any other specialized learning groups. The method selecting those groups should also be included.
- 5. Daily schedule: include times for specific subjects in the classroom as well as times when the students go to special classes. Be sure to include the schedule for the entire day.
- 6. Map of the classroom: a picture of the classroom arrangement. Include a paragraph about how you feel this

arrangement works.

The preservice teacher can report these data in outline form, but nothing should be left out. If something is not applicable, then that should be noted as well.

In the self-report instrument, an interest inventory of 15 items, children are asked questions regarding their favorite and least favorite subject, their favorite books, and what they like best about themselves and their families, etc. A copy of this interest inventory is included at the end of this chapter. The purpose of this interest inventory analysis is simply to get the preservice teacher to look at the personality of the class as a whole. After the inventory has been given, the preservice teacher will write an analysis of the results of questions 1-14. Unlike questions 1-14, question number 15 requires a sociometric analysis; consequently, it will be addressed separately. My suggestion regarding this process is to look at the answers in light of gender and/or cultural differences, any unusual or odd answers, and any questions that have uncommon agreement. The preservice teacher is not required to report on each question, because I want them to talk about those things that stand out to them. My main requirement is that their written analyses be easy to understand that is, clear and concise. Clear organization through the use of headings or other devices are encouraged.

Classroom Resources

Once the preservice teachers have collected information on the children in the classroom, I have them collect information concerning the resources available within the classroom and the school. I expect to see this in the same format as the first part of the demographics: that is outline form. The following information is required: