DOCUMENT RESUME

ED 410 207 SP 037 467

AUTHOR Damon, Linda; And Others
TITLE Preparing Teachers for Tomorrow: A Constructivist Approach.
PUB DATE 97
NOTE 8p.; Paper presented at the Annual Meeting of the American Association of Colleges for Teacher Education (Phoenix, AZ, February 25-March 1, 1997).
PUB TYPE Reports - Descriptive (141) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Constructivism (Learning); Course Descriptions; Elementary Education; Graduate Study; Higher Education; Integrated Activities; *Methods Courses; Preservice Teacher Education; *Teacher Education Curriculum
IDENTIFIERS University of Colorado Denver

ABSTRACT

A 12-hour curriculum/methods block designed to lead elementary education teacher candidates through a constructivist, integrated model of teaching and learning is outlined. This block is part of a graduate level program that leads to licensure and a master's of Curriculum and Instruction in Curriculum and Instruction called Initial Teacher Education (ITE). The major concepts of the course are: intelligence as a capacity to learn, diversity, constructivism, integration, holistic approach, inclusion, technology as a tool, collaboration, and reflection. Activities to build knowledge and understanding include developing a lesson plan based on research of a downtown urban community, and an extended classroom activity allowing for real life application of earth science, mathematics, social studies, expressive arts, and literacy. Activities to apply curriculum content include an extended classroom activity in which teacher candidates plan an integrated day based on the content of Colorado state history from 1850 to 1880 and planning a thematic unit using curriculum guides and standards, literature, and various technologies. Based on their understanding of how children learn and how differences among children impact learning, candidates develop curriculum, instruction, and assessment to meet the needs of all their students. (Contains 14 references.) (LH)

Preparing Teachers For Tomorrow: A Constructivist Approach

American Association of Colleges
for Teacher Education
Phoenix, Arizona
February, 1997

Linda Damon
Judy Duffield
Jami Goetz
Michael Marlow
Sally Nathenson-Mejia

University of Colorado at Denver
School of Education
Campus Box 106 • P.O. Box 173364
Denver, Colorado 80217-3364

303-556-8111
mmarlow@carbon.cudenver.edu

PREPARING TEACHERS FOR TOMORROW: A CONSTRUCTIVIST APPROACH

I. Introduction

The Initial Teacher Education (ITE) program is a graduate level program that leads to licensure and a masters of Curriculum and Instruction. We are a team of five faculty who teach two six hour courses that comprise a twelve hour curriculum/methods block for elementary teacher candidates (TCs) in the licensure part of the program. This presentation will describe how the block course has been designed to lead students through a constructivist, integrated model of teaching and learning. Information on the program and course will be presented followed by specific examples of how activities in the course engage students in building background knowledge and understanding that lead them to be able to design their own curriculum complete with literacy and content instruction, use of technology and assessment. The curriculum/methods course is provides opportunities for TCs to apply knowledge and understanding directly to their work in the schools.

II. History and Background of Course Development

As part of the program, several faculty members are assigned to teach a twelve hour curriculum/methods block that had previously been presented in six, 3 credit hour courses. The planning phase began in January 1994 based on the recognition by the professors involved that educational researchers and theorists are increasingly focusing on the connections, rather than the distinctions, between content, or *what* is taught, and instruction, or how learning occurs. Furthermore, as content area specialists call for greater integration among subjext that have historically been treated as discrete and unrelated, they also help render more permeable the walls between curriculum and instruction by suggesting that connections learners make naturally should be formalized in both curriulum design and instructional practice (Ackerman, 1989; Kyle, Abel & Shymansky,1992). It is our belief that this constructivist approach should not only be the subject of discussion in our course, but the model for how we teach the course.

The major focus of planning at this point was conceptualizing how to integrate all of the content areas in order to present them to students in a connected, continuous manner (Drake,1993). As the course has evolved over the last two years, this continues to be the foundation of course development. Pedagogical concepts are taught through activities which integrate content areas rather than through discrete content instruction.

III. Conceptual Foundation

In coursework prior to this course, TCs have focused on how children develop and learn. This course builds upon that knowledge and understanding support the development of their decision-making abilities regarding curriculum and assessment. The major concepts of this 12 hour course include:

A. Intelligence as a capacity to learn (Gardner,1991). Children's intelligence is seen as their abilities to create and adapt in a wide variety of ways, drawing on innate abilities and background knowledge outside of school as well as their school knowledge.

B. Diversity (Banks,1994). Children bring to school a variety of backgrounds: linguistic, ethnic/cultural, religious, gender, learning style, age.

C. Constructivism (Brooks & Brooks,1993). An approach to teaching based on the belief that children learn by doing, changing preexisting schema using new information acquired through varied experiences.

D. Integration (Drake,1993). Contrasting the notions that integration occurs in the mind of the child and that teachers integrate curriculum by explicitly making connections.
E. Holistic (Miller, Cassie and Drake,1990). The modeling of content instruction and assessment using a holistic perspective which supports integrated teaching/learning.
F. Inclusion (Sands, Kozleski and French, in press). TCs recognize the importance of identifying children's physical, affective, cognitive and communicative development and needs.
G. Technology as a tool (US Congress, 1995). TCs realize the potential for teaching/learning using all forms of technology available to them.
H. Collaboration (Pagach and Johnson,1995). Using the team approach to teaching this course we model collaboration. Through activities in which TCs engage in and evaluate their own collaboration they learn to work with peers as colleagues. These experiences prepare them for working with colleagues in schools and for teaching their own students to work together constructively.
I. Reflection (Posner,1989). As we are always in the process of becoming, always changing, we continually analyze what we do, and engage the TCs in analyzing what they are doing, for its impact on teaching and learning.

IV. Selected Course Activities to Build Knowledge and Understanding

Using a Gradual Release of Responsibility model (Pearson, 1985), course assignments and activities have been structured to model the links between curriculum development, instruction and assessment while at the same time allowing TCs to take an increasingly more active role in the development of these assignments. The following activities help to build knowledge and understanding of various pedagogical concepts and techniques.

A. ITE in the City

TCs are asked to gather information and develop a lesson based on their research of one particular section of the culture of the downtown urban community of which the university is a part. This lesson is presented to the entire class and a summary paper turned in.

B. Dinosaur Ridge

An extended classroom activity that allows for real life application of earth science, mathematics, social studies, expressive arts and literacy. It is a model of an integrated school day which occurs outside of the regular confines of a classroom.

C. Technology Pieces

Activities/assignments demonstrate and model the use of technology for research and presentation (video, overheads, graphs, etc.). In addition, TCs use various computer programs to create useful products and learn the potential of these programs for classroom instruction (HyperStudio, Kid Pix, Bilingual Writing Center, PiVIT)

D. Inquiry/Assessment Project

Focus is on individual assessment within a cooperative group assignment. TCs experienced working in a cooperative group in order to design an assessment procedure that is used to assess their individual performance in the group development of a thematic unit.

V. Selected Course Activities to Apply Knowledge and Understanding

The following activities allow TCs to apply curriculum content using their knowledge and understanding of various technologies pedagogical concepts and techniques in a more independent manner.

A. Plains Conservation Center Extended Classroom Activity

An extended classroom activity in which TCs, in small groups, research and plan an integrated day which includes instruction and assessment, based on the content of state history between 1850-1880 which is then presented in an authentic, 1800's outdoor environment.

B. Thematic Unit

TCs in self selected groups, choose topics, research the topics and develop instructional units using curriculum standards (state and professional organizations), district curriculum guides, up-to-date professional literature, informational adult and children's literature in the content area, various technologies, and an integrated, holistic, constructivist perspective.

VI. Course Outcomes

TCs come to understand what they believe about how children learn, understand the differences among children and how these impact learning, and as a result, develop curriculum, instruction and assessment that meet the needs of all their students.

Presentation Outline

I. Introductions - Chair

II. History and Background of Course Development

III. Overview of Conceptual Foundation

IV. Demonstration of Course Activities Designed to Build Knowledge and Understanding

V. Demonstration of Course Activities Designed for Application of Knowledge and Understanding

VI. Where We're Going From Here

VII. Open Discussion

References:

Ackerman, D.B. (1989). Intellectual and practical criteria for successful curriculum integration. In: H.H.Jacobs (Ed.), *Interdisciplinary curriculum design and implementation.* Alexandria, VA: ASCD.

Banks, J.A. (1994). *Multiethnic education: Theory and practice.* Needham Heights, MA: Allyn and Bacon.

Brooks, J.G. & Brooks, M.G. (1993). *The case for constructivist classroooms.* Alexandria, VA: ASCD.

Drake, S. M. (1993). *Planning integrated curriculum: The call to adventure.* Alexandria, VA: ASCD.

Gardner, H. (1991). *The unschooled mind: How children learn and how schools should teach.* NY: Basic Books.

Goodlad, J.I. (1994). *Educational Renewal.* San Francisco, CA: Jossey-Bass.

Kyle, W., Abell, S., & Shymansky, J. (1992). Conceptual change teaching and science learning. *Research matters...to the science teacher.* NARST Monograph # 5, 29-41.

Miller, J.P., Cassie, J.R., & Drake, S.M. (1990). *Holistic learning: A teacher's guide to integrated studies.* Toronto, ONT: The Ontario Institute for Studies in Education.

Pearson, P.D. (1985). Changing the face of reading comprehension instruction. *Reading Teacher,* 38:8, 724-738.

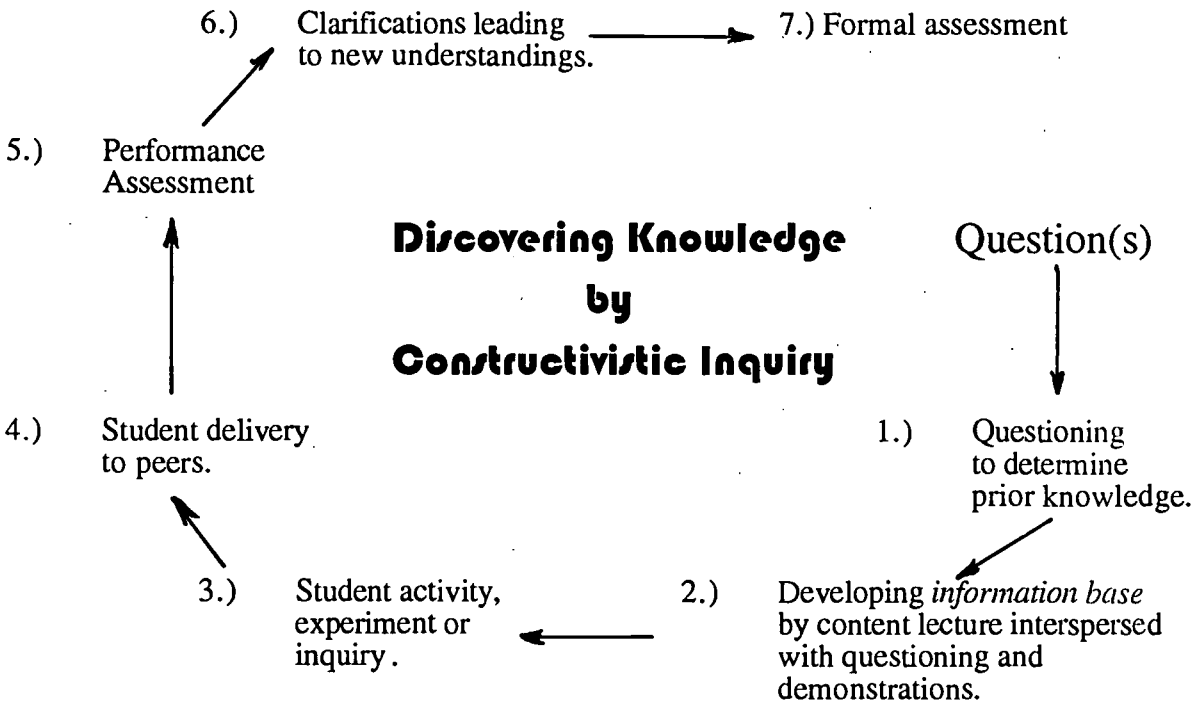
Posner, G.J. (1989). *Field experience: Methods of reflective teaching.* NY: Longman.

Pugach, M.C., & Johnson, L.J. (1995). *Collaborative practitioners, collaborative schools.* Denver, CO: Love Pub.

Sands, D., Kozleski, E., & French, N. (in press). *Special education for the 21st century: Making schools inclusive communities.* Pacific Grove, CA: Brookes/Cole Publishing Co.

U.S. Congress, Office of Technology Assessment. (1995). *Teachers and technology: Making the connection.* Washington, DC: U.S. Government Printing Office.

Teaching For Understanding



Methodology:

Inquiry Learning	Cooperative Groups	Discussion
Honoring Peoples Struggle	Peer Learning	Investigation
Embedded Assessment	Content Lecture	Inquiry
Discrepant Event	Needs Assessment	Persistance
Verbalizing Understanding	Teachable moments	Commitment
Demonstrating Understanding	Questioning	Wait Time
Answering Questions with Questions	Teacher Directed Learning	Student Directed Learning

---

Michael Marlow, University of Colorado at Denver 2/97

RESPONSIBILITIES OF TEACHERS

Scholar Instructor Student Advocate Professional Leader

Social Context

*Inclusion
*Multicultural
*Linguistic
*Personal Needs
*Classroom Management

Academics

*Scholarly Inquiry
*Content Knowledge
*Goals/Object.
*Standards

Instructional Strategies

Assessment/Evaluation Methodologies

Student Success

Independent Learners

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
Educational Resources Information Center (ERIC)

REPRODUCTION RELEASE

(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: PREPARING TEACHERS FOR TOMORROW: A CONSTRUCTIVIST APPROACH

Author(s): DAMON, L., DUFFIELD, J., GOETZ, J., MARLOW, M., NATHENSON-MEJIA, S.

Corporate Source: UNIVERSITY OF COLORADO AT DENVER

Publication Date:

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic/optical media, and sold through the ERIC Document Reproduction Service (EDRS) or other ERIC vendors. Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following two options and sign at the bottom of the page.

	The sample sticker shown below will be affixed to all Level 1 documents	The sample sticker shown below will be affixed to all Level 2 documents	
☒ Check here **For Level 1 Release:** Permitting reproduction in microfiche (4" x 6" film) or other ERIC archival media (e.g., electronic or optical) *and* paper copy.	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY Sample TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN OTHER THAN PAPER COPY HAS BEEN GRANTED BY Sample TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)	☐ Check here **For Level 2 Release:** Permitting reproduction in microfiche (4" x 6" film) or other ERIC archival media (e.g., electronic or optical), but *not* in paper copy.
	Level 1	**Level 2**	

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but neither box is checked, documents will be processed at Level 1.

"I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic/optical media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries."

Sign here→ please

Signature: Linda N. Damon	Printed Name/Position/Title: LINDA N. DAMON	
Organization/Address: UNIVERSITY OF COLORADO AT DENVER SCHOOL OF EDUCATION CAMPUS BOX 106 P.O. BOX 173364 DENVER, CO 80217-3364	Telephone: (303) 556-2289	FAX: (303) 556-4479
	E-Mail Address: ldamon@together.cudenver.edu	Date: MAY 28, 1997

CUA

THE CATHOLIC UNIVERSITY OF AMERICA
Department of Education, O'Boyle Hall
Washington, DC 20064

800 464-3742 (Go4-ERIC)

April 25, 1997

Dear AERA Presenter,

Hopefully, the convention was a productive and rewarding event. We feel you have a responsibility to make your paper readily available. If you haven't done so already, please submit copies of your papers for consideration for inclusion in the ERIC database. If you have submitted your paper, you can track its progress at http://ericae2.educ.cua.edu.

Abstracts of papers accepted by ERIC appear in *Resources in Education (RIE)* and are announced to over 5,000 organizations. The inclusion of your work makes it readily available to other researchers, provides a permanent archive, and enhances the quality of *RIE*. Abstracts of your contribution will be accessible through the printed and electronic versions of *RIE*. The paper will be available through the microfiche collections that are housed at libraries around the world and through the ERIC Document Reproduction Service.

We are soliciting all the AERA Conference papers and will route your paper to the appropriate clearinghouse. You will be notified if your paper meets ERIC's criteria for inclusion in *RIE*: contribution to education, timeliness, relevance, methodology, effectiveness of presentation, and reproduction quality.

Please sign the Reproduction Release Form on the back of this letter and stet **two** copies of your paper. The Release Form gives ERIC permission to make and distribute copies of your paper. It does not preclude you from publishing your work. You can mail your paper to our attention at the address below. Please feel free to copy the form for future or additional submissions.

Mail to: AERA 1997/ERIC Acquisitions
The Catholic University of America
O'Boyle Hall, Room 210
Washington, DC 20064

Sincerely,

Lawrence M. Rudner, Ph.D.
Director, ERIC/E