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ABSTRACT

The Early Childhood Program in the Department of Curriculum, Instruction and Administration at Tuskegee University (Alabama) is described as a convergence of Jean Piaget's constructivism and John Dewey's progressivism. It is designed to provide preservice teachers with experiences that promote reflective practice and that view the learner as an autonomous, inquisitive thinker. This paper discusses the program's philosophical assumptions, which are based on learning as a process of knowledge construction, not knowledge recording or absorption, and on the importance of reflection as a means of learning from experience. Program components that are believed to foster reflective thinking include: dialogue; learning through active participation; learning from practicing in actual situations; and reflecting through videotaping lessons, journal writing, and planning. Three interrelated elements of the developmentalist tradition of reflective teaching are discussed, emphasizing focused observation of children's behavior and the creation of learning environments that support children's development and interests, encouraging students to adopt an experimental attitude towards practice, and placing a premium on the artistic aspect of teaching. Feedback from students is reported, providing evidence that students are internalizing the program's basic tenets, are involved in problem-solving, and are reflecting on and questioning their practice. (Contains 32 references.) (JDD)

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A Constructivist/Reflective Paradigm:
A Model for the Early Childhood Program
at Tuskegee University

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Abstract

An exposé of the Early Childhood Program at Tuskegee University, a Constructivist/Reflective Paradigm, developed in accordance with the National Council for Accreditation of Teacher Education Standards. This program model that can be viewed as a convergence of Piaget's constructivism and Dewey's progressivism and is designed to provide preservice teachers with experiences that promote reflective practice that will enable them to construct a pedagogy that views the learner as an autonomous, inquisitive thinker.

A Constructivist/Reflective Paradigm:
A Model for the Early Childhood Program
at Tuskegee University

In developing the Early Childhood Education program at Tuskegee University we have been influenced by the work of Dewey, Piaget, Kohlberg, Bruner and Vygotsky. Principally, however, our perspective can be viewed as a convergence of Piaget's constructivism and Dewey's progressivism.

Philosophical Assumptions

Piaget (1976, p. 119) insists that children do not receive knowledge passively but rather discover and construct knowledge through activities. This view that the child actively constructs knowledge is called "constructivism."

Constructivists believe that effective instructional theories place the learner's mental activity at the center of any instructional exchange. This perspective emphasizes the following interrelated aspects of learning:

1. Learning is a process of knowledge construction, not knowledge recording or absorption. In other words, knowledge is actively created or invented by the learner, not passively received from the environment. In the words of Lauren Resnick, "Effective learning

depends on the intentions, self-monitoring, elaboration, and representational construction of the individual learner" (1989, p. 2).

2. Learning is knowledge-dependent. According to Robert Glaser (1984) both reasoning and learning are knowledge-driven. Those who are knowledge-rich reason more profoundly and they also elaborate as they study, allowing them to learn more efficiently.
3. Learning is highly tuned to the situation in which it takes place. In other words thinking and cognition are situated within the context of personal and social epistemology, belief and understanding of the learner (Resnick, 1989).
4. Meaningful learning occurs through reflection and resolution of cognitive conflict and thus serves to negate earlier, incomplete levels of understanding (Fosnot, 1989). Erroneous conceptions lead to the kinds of contradictions in the learner's mind that result in accurate knowledge.

In summary we believe that constructive learning occurs when the learner poses problems as well as solves problems (Karmiloff-Smith & Inhelder, 1974), makes inferences and investigates (Fosnot, 1989), resolves contradictions (Inhelder, Sinclair & Bovet, 1974) and engages in reflection (Fosnot, Forman, Edwards &

Goldhaber, 1988; Steffe & Cobb, 1983). The major assumption here is the portrayal of an active learner as well as an empowered learner.

The forerunner of constructivist education was Dewey's progressivism. In his writings Dewey stressed the dynamic process of growth and development and the need to encourage individuality and active exploration. Dewey also maintained that learning is rooted in experience and that knowledge derives from a process of inquiry. In How We Think: A Restatement of the Relation of Reflective Thinking to the Educative Process (1933), Dewey emphasized the importance of reflection as a means of learning from experience.

According to Dewey (1933) reflective thinking stems from an experience which is puzzling or surprising and leads to purposeful inquiry and problem resolution. Inferences drawn from the experience provide suggestions for future action. As such, reflection involves looking back as well as looking ahead. Critical examination or reflection of past events and experiences is necessary for the resolution of a felt problem. Also, Dewey (1933) articulated three essential attitudes and values that are central to reflective practice including:

- (a) Openmindedness. An attitude suggesting that practitioners do not automatically accept or reject

an educational idea, but rather examine it in the light of their own experiences.

- (b) Responsibility. This attitude implies that practitioners must not only be concerned with the immediate consequences of their practice but must also be concerned with the long term effects of a particular action.
- (c) Wholeheartedness. An attitude that enables practitioners to take risks and challenge tradition in order to implement their ideals into sound educational practice.

In developing a mature and competent conception of reflection, we are also guided by the four versions of reflective teaching practices that are identified by Zeichner and Liston (1990, p. 3) as follows:

- (a) Academic Version. This version emphasizes reflection upon subject matter and the translation of subject matter knowledge to promote student understanding (Shulman, 1987).
- (b) Social Efficiency Version. This emphasizes reflection upon research on teaching and the thoughtful application of particular teaching strategies (Ross & Kyle, 1987).
- (c) Developmentalist Version. A version that prioritizes teaching that is sensitive to students' interests,

thinking and patterns of developmental growth
(Duckworth, 1987).

- (d) Social Reconstructionist Version. This version stresses reflection on the social and political context of schooling (Beyer, 1988; Maker & Ruthbone, 1986).

While we encourage our practitioners to embrace all four versions of reflective practice, we appropriately focus on the developmentalist version as developed by Duckworth (1987), Fosnot (1989) and Perrone (1989). In the early childhood program we emphasize three interrelated elements of the developmentalist tradition. First, we emphasize focused observation of children's behavior and the creation of learning environments that support children's development and interests. Secondly, we encourage our students to adopt an experimental attitude towards practice, for along with Duckworth (1987, p. 133), we believe that teachers are researchers when they use their knowledge of students' understandings to decide the appropriate next step for their learning and keep trying to find out what sense the students are making as the instruction continues. Finally, we place a premium on the artistic aspect of teaching and believe that teachers demonstrate educational artistry when they reflect on their own practice, make sound judgments and

decisions based on their observations of children and create exciting and stimulating classroom environments.

The early childhood program at Tuskegee University has particularly been influenced by the writing of Dewey. We have taken seriously many excerpts from his work, such as the following:

The child is the starting-point, the center, and the end. His development, his growth, is the ideal. It alone furnishes the standard. To the growth of the child all studies are subservient; they are instruments valued as they serve the needs of growth. Personality, character, is more than subject-matter. Not knowledge or information, but self-realization, is the goal. To possess all the world of knowledge and lose one's own self is as awful a fate in education as in religion. Moreover, subject-matter never can be got into the child from without. Learning is active. It involves reaching out of the mind. It involves organic assimilation starting from within (Dewey, 1956, p.9).

Rationale

Many reasons can be given for adopting a constructivist/reflective paradigm for our early childhood program; however, for the sake of parsimony we confine ourselves to the following interrelated tenets:

- (1) Knowledge is actively created or invented, not passively received from the environment (Piaget, 1973).
- (2) New knowledge is created by reflecting on physical and mental actions. Ideas are constructed or made meaningful by integrating them into existing structures of knowledge (Piaget, 1973).
- (3) No one true reality exists, only individual interpretations of the world (Piaget, 1973).
- (4) Learning is a social process in which children grow into the intellectual life of those around them (Bruner, 1986).

Goals and Objectives

The faculty in the early childhood program at Tuskegee University are committed to the preparation of enthusiastic and dedicated teachers who have a solid understanding of children's interests and knowledge, stimulate children's reasoning through the skillful selection and organization of activities, guide children by questioning and posing problems and reflect on the teaching/learning process as the basis for the construction of pedagogical principles. More specifically, Tuskegee University seeks to prepare early childhood practitioners who:

- Know the subjects they teach and the interrelationships among the subjects
- Demonstrate knowledge of human growth, development and learning and are able to apply this knowledge to teaching young children
- Plan curriculum and are skilled in choosing and adapting instructional strategies which empowers students to construct their own knowledge
- Plan experiences that recognize, respect and respond to the racial, cultural and gender diversity of students
- Use educational technology to facilitate children's learning
- Monitor students' progress on a regular basis
- Think critically and reflectively about all aspects of education and are able to resolve problems
- Participate in the life of the school community as active members
- Work cooperatively and productively with parents for the benefit of their children
- View learning as a continuous process, seeking new information and experiences

Instructional Features of the Early
Childhood Education Program

In order that teacher education graduates demonstrate knowledge, skills and dispositions based on the theoretical underpinnings of the program, the faculty have made every effort to develop the curriculum to reflect the spirit of the program philosophy and theme. Believing that students will learn to construct their own knowledge and to reflect when they are provided with opportunities to practice reflective problem solving, we have incorporated a number of instructional vehicles in our program that we believe will foster reflective thinking including: (1) dialogue, (2) learning through active participation, (3) learning from practicing in actual situations and (4) reflecting.

Dialogue

Because we believe that learning occurs primarily through dialogue between student and environment rather than transmission from the environment to the student, our courses are designed so that students as well as teachers think and contribute to the discussion.

For example, the course "Foundations of Education" requires students to discuss with others "the school of thought that is most consistent with their beliefs about

the purpose of education, the nature of the curriculum, the role of the teacher and the role of the learner."

The constructivist perspective suggests that teacher candidates should be engaged in questioning, hypothesizing, investigating, imagining and debating real phenomena related to the area of study--the real thing, not books or lectures about it (Duckworth, 1987).

Therefore, a major focus of the science methodology course is to help students notice what is interesting and to encourage them to think, ask questions, and to explain their understanding to others. During class students endeavor to investigate phenomena such as the moon by keeping "journals of their observations." Class discussions focus on their observations and provide a common ground for making sense of what they see. We agree with Duckworth when she suggests that by allowing preservice teachers to pursue their own investigations in content areas, they will develop an understanding of how to encourage inquiry in children (Duckworth, 1987).

Just as faculty encourage teacher candidates to explore children's understandings, misconceptions and feelings, we must strive to understand the many and varied experiences that our students bring with them to teacher education. Our early childhood majors write about their early experiences of family, of learning and

of being in school. By writing about these many and varied experiences, our students begin to examine and reflect on their past experiences, many of which were devastating; as a result, many of them become self-transcendent and in the language of Henry Giroux (1988), intellectually transformative. One student writes:

To give a little background on my elementary school, it was an all white school located in a racist, upper-middle class white town. The white people in this town did not want any blacks living in their neighborhood or going to their schools. Therefore, they resorted to name calling and racist acts. The teachers at my school were equally racist as the people in town, and did not have any fear in showing it to their black students. Many of my school experiences at St. Joseph's were not good, but the climax of my worst experience came about in the seventh grade. One day my seventh grade teacher, Ms. Cross, called my friends and me "ugly." Her exact words were, "I feel sorry for you guys when ya'll grow up because you're so ugly and not the smartest people in the world, I don't know what you're gonna do." At the time when Ms. Cross made that comment it was the middle of the school year, but for me it was the last day of school. I became

an empty vessel who was not becoming filled with any knowledge....So here I am, back at Tuskegee University preparing to student teach and graduate in Spring 1993 as a full-fledged teacher. Before I conclude this personal history, I'd like to say "thank you" to Ms. Cross because, although her words were harsh and UGLY, she inspired me to become the teacher that she never could be.

Students Learn Through Active Participation

In every course students are actively challenged to participate in the educational process by developing and teaching their own lessons, engaging in dialogue, taking field trips, participating in professional conferences and workshops, recording ideas in journals and interviewing children.

Our program at Tuskegee University begins with the "Freshman Seminar for Teaching" by encouraging our students to reflect on the nature of teaching and by helping them become aware of the community context. We endeavor to do this by placing students in various Tuskegee area schools and by having them conduct a mini-ethnographic study on their observations of the total environment of the classroom. Students are asked to reflect on their previous experiences in school and explain how their perceptions of their assigned

classrooms are affected by their earlier experiences. Instructors guide students' inquiry through readings, guest lectures, and class discussions and students interview teachers and administrators about their perceptions of the school and community.

In a methodology course for math, students investigate the learning and thinking of children. Through the use of "clinical interviewing" (Labinowicz, 1985) students explore children's reasoning and hypothesize on their misconceptions. Audiotapes of the interviews offer occasions for other students and faculty to gain insights into the understandings of children.

A major focus of the science methodology course is a field trip that enables students to experience first-hand natural phenomena. In the past trips have been planned to Calloway Gardens where students toured the John A. Sibley Horticultural Center, the Wildflower Trail, and the Cecil B. Day Butterfly Center. The objectives of these trips are both cognitive and affective. While students learn some basic facts about science, perhaps more importantly, the field trips served to promote certain values that should be attached to science education, the development of a sense of appreciation for the beauty of the natural world.

Students Learn from Practicing in Actual Situations

Research shows that information from courses cannot always be generalized to real situations and that students learn from practicing in actual situations (Anderson et al., 1990). Therefore, prospective teachers spend more than 164 hours in clinical experiences prior to the student internship in different schools and with different grade levels. Clinical experiences are especially intensive during the junior and senior years when prospective teachers engage in a variety of experiences. Students' assignments at the school are demanding and include observing and planning and providing for instruction. Students are also provided opportunities to solve problems, discuss theoretical applications and reflect on their own experiences. Faculty obtain feedback from students through observations, journals, videotaped lessons, class discussions and conversations (Anderson et al., 1990).

Coaching

Students develop teaching competencies through supportive coaching. Coaching is critical if real change is to occur in practice in public school classrooms and if innovations don't revert back to older schemes of teaching (Fosnot, 1989). University faculty members visit the lab site at least three times a week to plan

educational activities cooperatively, offer suggestions, and provide feedback informally after the lesson and in written evaluations. Coaching also occurs during individual conferences as well as class meetings when videotaped lessons are viewed. Peers as well as instructors provide multiple perspectives on the lessons.

Reflection

The faculty at Tuskegee University feel that preservice teachers will benefit from carefully designed experiences that promote reflective practice and that will enable them to construct a pedagogy which views the learner as an autonomous, inquisitive thinker. Therefore, each component of our program serves to support reflective thinking and practice. Course work that emphasizes dialogue and critical thinking helps teacher candidates become reflective as they begin to construct their own conception of the knowledge base. During the clinical experiences our students learn to teach by teaching in real situations and then by reflecting on the nature of that teaching experience. And finally, conferences between preservice teachers and faculty aid teacher candidates in reflecting and making sense of their new experiences.

Reflection through Videotaping. One way that we promote reflective practice during the clinical

experiences is through the use of videotaped lessons and is similar to the approach described by Armbruster, Anderson and Mall (1991). Preservice teachers record each other conducting at least one lesson for each of the methodology courses to which they are assigned. To complete each assignment, the preservice teacher:

- Writes a detailed lesson plan which takes into consideration the interests, needs, misconceptions and general ability levels of students
- Conducts the lesson
- Reflects on the lesson in writing by discussing what she/he felt went well and what went wrong
- Views and discusses the videotape with her/his instructor or cooperating teacher

Three of the instructional features of the early childhood program are nested in the videotaped activity:

- Preservice teachers learn from practicing in actual situations as they teach lessons in real classrooms
 - Coaching occurs as university instructors offer feedback either informally after the lesson is taught or while watching the videotape
- Cooperating teachers and university instructors provide feedback in written evaluations

- Preservice teachers are offered occasions for reflection as they are encouraged to "think back" about the lesson they have taught and discuss strategies implemented with cooperating teachers, instructors, and at times other students. The focus here is to provide an opportunity for problem solving, creativity, and real pedagogical decision making.

Reflection through Journals. Journal writing is an integral part of the clinical experiences and is another vehicle for promoting reflection. We ask our preservice teachers to write and reflect regularly about their beliefs about teaching, observations of children, responses to school and classroom environments, and interactions between themselves and children. Journals are submitted to instructors of methods courses and one copy containing feedback in the form of questions or comments is returned to the student. Examples are frequently used from the journals to illustrate various issues discussed in class.

Our preservice teachers frequently share their concern about the social context of schooling and the existing inequalities and relate those issues to their own circumstances and observations. Because our students are of African-American heritage, they enter the

profession of teaching with deep personal scars. They have witnessed first-hand the inequality of our system and the social injustice that is so pervasive. It is from this background that our students are committed to "making a difference." The journal entries allow us a glimpse into their personal histories and we learn how they aspire to make a difference. One preservice teacher writes:

On Thursday, October 22, I did a lesson that I felt went very well. I read a short story to the class titled "It Could Be a Lot Worse" by Margot Zemach. The title alone intrigued me to want to read it. It told of a man who thought that his life was so bad - - until he found out that it could be a lot worse. I definitely wanted to read it to my class because I can relate to that and I know that the students at South Macon can, also. So, what I did was to read the story to them, and then asked them what they got out of the story. This then led to a discussion on my life and how I related myself to the story. I told them how it was for me when I was growing up, how I grew up in a single-parent family, how we were on welfare for a period of time, and how one day I remember being so hungry that I ate a bowl of ketchup. I expected them to laugh, and some did.

But that is something that I will never forget as long as I live! I also told them how some of my friends always had the latest everything, and I did not. But one thing that I realize now that I did not realize then was that although I never always had what I wanted, I always had what I needed, and there was a big difference! I wanted them to realize that even though what I experienced when I was growing up may not have been all that good -- there are those who didn't even have the little that I did. This gave me the perfect opportunity to talk about the homeless and other people who are less fortunate than we are. I never once said that I knew that most of them in there were in the same situation or worse. I just wanted them to realize that things could be a lot worse. I thought that there was no better way to get this point across than by showing them I experienced it myself and I know how it feels. By their responses and questions I could see that they really were into the discussion, probably because they knew just what I was talking about.

Working in the public schools has also brought disturbing realities to the forefront. A student teacher

assigned to a racially mixed setting experienced the undercurrents of our racist society. She writes:

On our field trip to Calloway Gardens there were three parents, two teachers, and myself. I was the only Black person -- I felt like a "speck."

Another student shares her sensitivity about the personal lives of children:

Story time arrived and the children were very anxious to hear one. Mrs. Ownes read the story "What Mary Jo Had Shared." She let the children make predictions about the story. The story ended with the character, Mary Jo, sharing her father. My only problem with this activity was when Mrs. Owens asked the children what kind of jobs their fathers had. The backgrounds of the children became apparent when some of the children were unable to answer this question. They sat bored and were no longer interested in the story. This made me realize that a teacher has to be careful about selecting stories to read and sensitive to the questions asked.

A student teacher sums up the feelings that so many of our students have articulated:

I wonder if I will make a difference in a young child's life. I wonder if I will fall into the

teaching trap that so many other teachers have fallen into -- the "I just go to work and get a pay check mode". I pray not. I hope the desire to make a difference continues to burn in my heart -- and stronger by the day.

We respond in writing to the journal entries and guide students either intentionally or unintentionally by providing our own perspectives. For example, a journal entry by Connie, a preservice teacher, begins:

This week I introduced a new art technique to a small group of children in a room adjacent to the regular classroom. I attempted to integrate science and math with this activity and began by allowing the children to mix their own food coloring, pour their own cornmeal, and predict how much food coloring they would need. The children came up with spectacular colors and were excited over the sensations of mixing the food color with the cornmeal. I felt this was an excellent project.

A faculty member responds to Connie's journal entry by urging her to think about future situations:

I would like you to think about how you might organize the classroom if you were going to conduct the "cornmeal" activity with a class of several children. Classroom management can be difficult

with science and art. Variables that can influence the outcome of an activity include the individual characteristics of the children, the number of children and the number of adults in the classroom. If the children are provided with choices and if your classroom is organized around centers, you could work with just a small group. This is an issue that you will need to consider. Begin to get ideas now, observe as many situations as you can and talk to others.

Reflection through Planning and Teaching. Our preservice teachers plan and teach several lessons before student teaching. We ask them to plan carefully and reflect on their actions. In reflecting on their activities preservice teachers are urged to share their "triumphs" as well as their "defeats" and to look at each situation or problem as an opportunity for growth. They are challenged not only to relate their personal viewpoint, but also to analyze the situation from the perspective of their pupils. Finally, we encourage preservice teachers to provide reasons for their beliefs and instructional decisions.

Wanda Jackson reveals her struggle to come to know herself as a curriculum maker in the classroom in the following journal entry:

Today I did a math lesson in which the children wrote their own original story problems, using their birthdays. I used Christopher Columbus as the example and had three story problems about his birthday as samples, which the children helped me solve. I was videotaped doing this lesson, and for some unknown reason, I was much more comfortable than usual. I'm usually stumbling over my words and not making clear what I want to say, but today, the lesson went smoothly. Larry even told me that I am "ready to enter into the profession." If he had to critique me now, he said, he would definitely say I was ready. He has no idea what it means to me to hear him say that. So often I find myself feeling that I'm very good at the executive functions of teaching, but my interactive skills and persona need a lot of work. Unlike some of the other lab students, I have difficulty hugging everybody and pinching children's cheeks, and getting in on every child's conversation, but now, to hear someone say such a thing after he has watched a lesson of mine gives me a huge amount of much-needed confidence. When I returned to the classroom, I was much more interactive than usual, because now I felt like I could be, without acting or being annoying.

Wanda's story is as unique as she is as a teacher. We see Wanda's attempts to make sense of her work with children, not as the transmitter or implementor of a curriculum and objectives, but as someone engaged with her own and children's lives.

Monitoring Progress

Methods of monitoring students enrolled in the Early Childhood Program at Tuskegee University are outlined in the document, "A Report of the Self-Study Program submitted to the National Council for the Accreditation of Teacher Education" that was submitted to NCATE (1992). The elements of the SED plan include: 1) continuous monitoring of student progress, 2) evaluation and documentation of curricular experiences, e.g., student teaching, video taping, journal writing and classroom observation, 3) satisfaction of the GPA by the University and State Department of Education, 4) performance on an external, national and norm-referenced examination such as NTE, 5) exit conference conducted by SED faculty (Appendix H).

Program Evaluation

Evaluating the effectiveness of a teacher education program is problematic. Many of the problems involved have been documented in the literature. For example, Ross, Johnson & Smith (1992) in their discussion about

the problems involved in assessing the impact of a teacher education program on students mention several reasons including the following: 1) Each student experiences the program differently based on her/his own entering perspective; 2) programs are different for different students depending on such variables as contexts in which student teaching is done, the model provided by cooperating teachers, and in the nature of the feedback provided by instructors. Tabachnick and Zeichner (1983) concluded in their study of the socialization of preservice teachers that teacher education enables students to clarify and elaborate their perspectives but does not change them. Another major problem mentioned by Ross et al. (1992) is that the traditional psycho-statistical model does not lend itself to the evaluation of reflective paradigms and that isolating individual variables in a controlled study would violate what we believe about teaching and learning.

Nevertheless, we have received feedback from students that provide us with evidence that students are internalizing the basic tenets of our program, are involved in problem solving, and are reflecting on and questioning their practice. This informal information we have gathered has come to us from observations, journals,

conversations, faculty members and open-ended conversations.

For example, students frequently do "research on action" as evidenced by the following comment:

Today I conducted another math lesson at South Macon. This activity was called "Cows n' Chickens." The purpose of this activity was for students to solve a mathematical problem working in a cooperative way. I introduced this activity by reading a story about a farmer. The farmer wanted to know how many legs and tails his 11 cows and 15 chickens have altogether. The children could solve the problem by drawing pictures or using other objects to represent the animals. Only two students found the correct answer. In reflecting back on this activity I believe there were two reasons why the children did not meet this activity with success. First, while this group of second graders had worked with place value and regrouping, their previous experiences were only based on memorization of facts and working through the algorithm. I don't believe they had been offered any opportunities for actually constructing number. Secondly, the children had no prior experience with real problem solving. I believe that they would experience more success by working first with numbers below ten.

While a change in perspective is the basis of the development of reflective practice, several difficulties arise when our novice teachers are confronted with conflicts between the knowledge base discussed within our program and practices encountered within the classrooms. For example, many of our students realize that assertive discipline is not reflective and many have voiced their opposition to the approach; however, in their clinical experiences they sometimes do not see other models and feel compelled to accept the practice.

Another example of a contrast between the SED knowledge base and existing classroom practices is provided when a student, confused about which reading approach is more effective, ponders:

On my first observation in Mrs. Anderson's classroom I noticed that she had established a good rapport with the students. But something made me think. In all of my education classes we are talking about whole language and no one really seems fond of basal readers, but so far all I have seen is worksheets and basal reader assignments in the classroom. It does not seem like there are any problems with the students learning and this makes me confused. From what I know about whole language, it does seem like a great method to use, but if that is the case, why

isn't everyone using it? I want to do what is right and some good advice was to use the method that I am most comfortable with, but what if that method isn't best for the students. Sometimes I get so confused on what I should do. Hopefully, as I experience more and grow as an individual I will be able to decide what is best for myself and most important for my students.

Still another conflicting issue that has arisen between the perspective of the early childhood program and classroom practice concerns the issue of worksheets. One student writes:

Later in the morning, I was asked to work through two spelling worksheets with the children. I discovered that in spite of all the negative propaganda we've gotten about worksheets, some students enjoy doing them (at least some of the time). Several students even asked me if we could do some more. It probably has a lot to do with the success they had with these particular worksheets. I guess any time the children are successful, they are motivated to do more.

Our students frequently voice their opposition for reductionist views of teaching and their implications for classroom practice. Donna, a junior-level student,

discusses the common practice of ability grouping that she has observed:

She has the "smart" students in the middle of the classroom, the average students on the side of the classroom where she sits and the students who are below average sit by the door. Now, I have heard her distinguish the groups to the class. The students who sit by the door, the below average group, are easily distracted by the noise in the hall and from looking across the room out the window. They also know why they sit where they sit. I spent a lot of time with this group and found that while they are not as attentive or make as many contributions as the other group, they are as bright as the other students. From my observation I concluded that their inattentiveness and their refusal to contribute to the class was probably because they felt isolated or even "dumb." If a student thinks he is "dumb" and he sits with the other "dumb" kids, of course, he's not going to contribute to the class. He doesn't think that what he has to say will be important.

Finally, a student "looks back" on the semester's experiences in the SED program:

It is almost unbelievable how one person's thoughts can be altered about so many things in just one semester. Since my last day at South Macon Elementary School last semester, I've thought a great deal about the school itself, the teachers, and more importantly the children. My experience also enabled me to make comparisons and contrasts to how I think I would teach and what attitudes that I will have towards my students specifically, and my career in general. I noticed and experienced a lot of things, some good and some bad, but all were learning experiences.

We also seek feedback from our students regarding their perceptions of the program. Students are frequently asked to respond to open-ended questionnaires. Generally, students have responded favorably to the program as evidenced by the following comments:

* I personally liked the personal history paper because it forces you to go back and reevaluate why you chose this major. Also, it made me understand a lot more about myself and my personality.

* Another student comments: Personally, I had a very rewarding clinical experience this semester because my lab teacher was great, and I didn't have so many assignments that I stopped caring about the

students' learning (which is what happened last year). I think we should go back to meeting at 10:30 as we did in the beginning, while the events of the day are still fresh. Also, it would help if we had somebody available to do the videotaping.

* In still another example: The activities we did in class were most useful in that we were able to clear up our misconceptions about math and teaching math. And it gave us a change to imagine how children would react to some of the mathematical logic we learned in class.

* Of particular value is this student comment: I learned more about children from working directly with them. There is a lot more knowledge to be gained about children by actually working with them. I learned about their behavior and how to improve it. I also have learned that all children do not learn at the same pace. I learned that you must try different methods of getting a lesson to be understood by an entire class.

Responses have also revealed the frustrations that students have at times experienced:

My experiences this semester have made me think about my personal goals. How? They may seem impossible or undesirable given the not-so-pleasing

situations I have been in -- both with cooperating teachers and instructors. I think these experiences and feelings of anger, depression and loneliness have only been stepping stones into my pathway of professional growth. I've learned, I've grown, and I'm still growing.

Faculty also provide their own perceptions on the effectiveness of the courses they have taught at the end of each semester. The instructor for the science methodology course makes the following observation:

A major aim of this course is to help preservice teachers recapture some of their earlier enthusiasm of thinking about the world. Therefore, it is always rewarding and amazing to watch preservice teachers become excited in actively making discoveries about science phenomena.

The "Moon Watching" activity (borrowed from E. Duckworth of Harvard University) was a case in point. While many students couldn't understand the value of the moon watching activity at the beginning, eventually nearly the whole class was involved in a dialogue based on their observations.

Students asked their own questions and made their own predictions. This activity was a success!!

While we will not be able to fully realize the impact of our program until we are able to study our graduates during their beginning years of teaching, we continue to grapple with the issue of evaluation. We believe at the present time perhaps the most significant criterion for evaluation is whether the process is contributing to our understanding of what is involved in learning to teach.

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