

Preservice Teachers' Beliefs about Primary Classroom Practice: Similarities and Differences between Early Childhood and Elementary Prepared Students

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Abstract

Two different professional preparation paths lead to teaching positions in the primary grades, resulting in conflicting paradigms. In early childhood education (ECED), child development theory traditionally serves as the context for decision making regarding instructional strategies and curriculum content. In contrast, elementary education (ELED) historically focuses on prescribed grade-related student outcomes as the context for curriculum and instruction. A study was conducted to examine the beliefs of 119 preservice teachers who were either at the beginning or end of their teacher preparation programs in ECED or ELED. Participants completed a survey that questioned their beliefs about curriculum content, teaching strategies, guidance/discipline, classroom activities, and assessment. Results indicate that ECED students favored classroom practices that were more consistent with the National Association for the Education of Young Children guidelines for practice than did ELED students. ECED students at the end of their program favored more child-directed curriculum and less frequent use of teacher-directed activities than did students at the beginning of their program. ELED students at the end of their program favored more behavioral classroom management strategies and less frequent use of child-directed activities than did beginning students.

Questions of what to teach are important at every level of education, including teacher education programs. It is equally true that at all levels the American education system is marked by both ongoing changes in curriculum and the enduring effects of history and tradition. Teacher education programs have been “put to the fire” recently in response to societal expectations that schools improve in producing learning outcomes with children. Consequently, the obligation to examine our educational practices, while always important, is a vital task for teacher educators today. Do we have a clear sense of what we want students to learn? How effective are our programs at accomplishing our purposes? These broad questions served as the frame for this study.

Historically, and continuing today, there are a variety of configurations for early childhood teacher licensing, including a stand-alone license, an endorsement added to elementary education, and no specialized early childhood license for the early primary grades (grades 1-3). Current momentum is toward common use of a stand-alone early childhood license that encompasses birth through age 8 (Isenberg, 2000). This movement reflects the National Association for the Education of Young Children's (NAEYC) definition of the early childhood period (Bredekamp, 1996). Although early childhood stand-alone certification is growing, it cannot be expected that it will replace elementary certification in the primary grades. More and more, teachers with either an early childhood education (ECED) or elementary education (ELED) teaching certificate might educate children in the early primary grades. The question of how ECED-prepared teachers compare with ELED-prepared teachers consequently becomes important. School districts will have increasing choices for hiring for the primary grades related to the area of undergraduate study and certification.

Early childhood and elementary education have separate histories and a tradition of different teaching practices (Bloch, 1992; Goldstein, 1997). The child-directed and play-oriented methods that have predominated in ECED stand in contrast to the traditionally heavier reliance in ELED on teacher-directed, large-group instruction and discrete content areas. Another way of probing these traditional differences is to identify key terms in each field. For example, in ECED, common key terms are

“development” and “activities”; while in ELED, common key terms are “methods” and “lessons.” This language illustrates the deep-seated influences of developmental psychology and curriculum theory on ECED and ELED, respectively (Day & Goffin, 1994).

Since its initial publication in 1986, the NAEYC’s position statement on developmentally appropriate practice (DAP) has grown in its influence on primary grade practice (Day & Goffin, 1994). Although the statement originated in one professional organization that had historical roots separate from public schools and the elementary grades, its tenets were later promoted by other organizations, including the National Association of State Boards of Education (1991) and the National Association of Elementary School Principals (1990). In spite of the longstanding traditional differences between ECED and ELED, there are now movements to more closely align the philosophy and practice of the two.

This research is thus situated within a context of both contrast and change, not only between the professional fields, but within each as well. While there are wide variations in primary grade practices (e.g., whole language, phonics), similarly research has shown that DAP is not invariably observed in early childhood practice (Dunn & Kontos, 1997). Nor is DAP universally embraced by teacher educators (Delpit, 1988; Swadener & Kessler, 1991). Indeed, the DAP statement has been revised once since its original publication (Bredenkamp & Copple, 1997) and was recently characterized as a “working document” (Dunn & Kontos, 1997).

In this study, our instrument was drawn from the NAEYC’s DAP statement, in deference to its widespread adoption as a guiding position for practice. The majority of research about DAP has taken place within preschools and kindergarten classrooms, but recently researchers have begun to examine the early primary grades. Buchanan and her associates found that teachers in the first, second, and third grades varied in their agreement with DAP on an attitude survey (Buchanan, Burts, Bidner, White, & Charlesworth, 1998). They also found that teachers certified in ECED reported using developmentally inappropriate activity examples less frequently than

teachers certified in ELED. There was no significant difference related to certification in their self-reported use of developmentally appropriate activity examples, however. Vartuli (1999) also surveyed practicing teachers. In this study, the teachers were employed in classrooms at the preschool (Head Start) through third-grade levels. Again, the results indicated that teachers with ECED certification expressed attitudes more aligned with the DAP statement than teachers with an ELED certification, although teachers with ECED certification were more likely to be teaching Head Start and kindergarten. Somewhat similarly, among a small sample, McMullen (1999) found that primary-level teachers (kindergarten through third grade) expressed attitudes more aligned with DAP if they had ECED degrees or ELED degrees with previous teaching experience at the preschool level when compared with teachers with an ELED degree and no experience below the primary level.

Only one study has examined preservice teachers using similar methodology. Surveying students at the beginning and end of the student teaching semester, Smith (1997) found that students in an ELED program with ECED endorsement reported more agreement with DAP than students in an ELED-only certification program at both survey periods. Also, ELED-only students reported higher agreement with a subscale measuring traditional practices than did the students in the ECED endorsement program. Thus, the differences noted by researchers surveying practicing teachers appear to have their roots during the preservice period.

The current study extends the knowledge in the field in two ways. First, both beginning and end-point preservice teachers were surveyed, allowing a comparison of both major discipline (ECED or ELED) and point in program. In what ways were students similar and different in their beliefs as they began the teacher socialization process and as they began the capstone experience of student teaching? Also, in the institution studied, ECED is a stand-alone certification option; the ECED and ELED programs are housed in the same department but have individual professional education requirements, coursework, and faculty, in contrast to the Smith study. Second, in previous research, the scale and subscale scores analyzed have been framed as

developmentally appropriate and developmentally inappropriate or traditional. In this study, composite scale scores were analyzed as well as subscale scores of conceptually related items to provide a finer-grained understanding of points of agreement and difference between students in the two professional disciplines. For example, do attitudes differ when the items relate to classroom management, to assessment, to curriculum, etc.?

The research questions for this study were as follows:

1. What are the similarities and differences between beliefs about primary classroom curriculum and instructional practices held by beginning students and student teachers who are enrolled in an ECED teacher preparation program?
2. What are the similarities and differences between beliefs about primary classroom curriculum and instructional practices held by beginning students and student teachers who are enrolled in an ELED teacher preparation program?
3. How do ECED and ELED preservice teachers at the beginning and end of their teacher preparation programs compare to each other with regard to beliefs about primary classroom curriculum and instructional practices?

Method

Sample

Participants for this study were 119 preservice teachers enrolled in either an ECED or ELED teacher training program at a large midwestern university. The sample included 45 students who were enrolled in the ECED program (24 beginning students; 21 student teachers) and 74 students who were enrolled in the ELED program (30 beginning students; 44 student teachers). The beginning students in each of the teacher certification programs were in their first semester of classes in their respective majors. The student teachers were in the final semester of their major. After students begin their professional programs, the course sequence takes approximately two years. Students begin their professional program upon completion of their general education requirements.

Procedures

Participants were surveyed at the beginning of the semester using the *Beliefs about Primary Grades Curriculum and Teaching Survey*, a modification of the primary version of *Teacher Beliefs and Practices Survey* (Burts, Buchanan, Charlesworth, Fleege, & Madison, 1995). The statements in the survey were based on NAEYC's position statement on developmentally appropriate practice in the primary grades. The beginning students completed the survey in their first class in their respective major, while the student teachers filled out the survey in their respective student teaching seminars.

The survey was divided into two sections. In the first section, "Primary Grade Beliefs," students responded to statements about primary grade teaching practices. Students' beliefs regarding the importance of teaching practices in the primary grades were assessed. A five-point Likert scale was used (1 = not at all important to 5 = extremely important). Items from the "Primary Beliefs" section included statements such as:

It is _____ for teachers to use reinforcements such as treats, stickers, and/or stars to encourage appropriate behavior.

It is _____ for primary grade children to learn by actively exploring relevant and interesting materials.

Six scores were obtained, a composite score and five subscale scores. The subscales included only those items from the survey that pertained to that particular subscale area, while the composite score was made up of the total of all items. The subscales for the "Primary Grade Beliefs" section included (1) Behavior Management, (2) Teaching Strategies, (3) Child Expectations, (4) Curriculum, and (5) Assessment.

In the second section of the survey, "Instructional Activities," students responded to statements regarding their beliefs about the appropriateness of various primary grade activities. In this section, students rated the various activities according to how often certain activities should take place in the primary classroom. A five-point Likert scale was used (1 = almost never

to 5 = daily). Items from the “Instructional Activities” section included statements such as:

How often should children in a primary class play competitive games to learn factual material (e.g., math facts, states)?

How often should children in a primary class use manipulatives (like pegboards, puzzles, Legos, Unifix Cubes, tangrams, geoboards, base 10 blocks, and/or Cuisenaire Rods)?

Four scores were obtained, a composite score and three subscale scores. As in the previous section, the subscale scores were made up of specific items in the survey, while the composite score was the score obtained when all of the survey items were combined. The subscales for the “Instructional Activities” section of the survey included (1) Behavior Management, (2) Child Directed, and (3) Teacher Directed.

For each of the two sections in the survey, a higher score would mean that students’ beliefs were more consistent with NAEYC’s statement about primary teaching. Some of the items in the survey were stated in such a manner that if it were scored a “1” by the respondent, it meant that their beliefs were consistent with the NAEYC standards for primary teaching, while others were stated such that a “5” indicated that the respondent’s beliefs were consistent with the NAEYC standards. For this reason and for purposes of analysis, some items were reverse coded so that an appropriate comparison could be made. Means on the composite scales and subscales were used in the analyses.

Results

In order to answer the first question, ANOVAs were performed on the ECED beginning students’ and student teachers’ “Beliefs” and “Activities” composite scores. Results of the analyses indicated that there was a significant difference between the groups on the “Beliefs” composite score [$F(1,44) = 5.25, p < .05$]. Examination of the means indicated that the student teachers scored significantly higher than the beginning students. The difference between the two groups for the “Activities” composite score was not significant [$F(1,44) = 1.04, NS$].

In order to determine if there were any significant differences between the two ECED groups on the “Beliefs” and “Activities” subscales, Multivariate Analysis of Variance (MANOVA) was performed on the subscale scores. For the “Beliefs” subscale scores, the multivariate F was not significant [$F(1,44) = 1.32, NS$], therefore the univariate tests were not examined. The multivariate F for the “Activities” subscale was significant [$F(1,44) = 5.29, p < .01$]. Examination of the univariate F s indicated that the student teachers scored significantly higher on the “Teacher-Directed” subscale [$F(1,44) = 7.07, p < .01$], thus were more aligned with DAP. The difference between the two groups on the “Behavior Management” subscale approached significance [$F(1,44) = 3.76, p < .06$], with the beginning students scoring higher than the student teacher group. Means and standard deviations for the composite score and subscale scores for the ECED beginning students and student teachers can be found in Table 1.

In order to answer the second question, ANOVAs were performed on the ELED beginning students’ and student teachers’ “Beliefs” and “Activities” composite scores. Results of the analyses indicated that for the “Beliefs” composite scores, there was no significant difference between the groups [$F(1,73) = 0.13, NS$]. The ANOVA performed on the “Activities” composite score indicated that there was a significant difference between the groups [$F(1,73) = 5.60, p < .05$], with the beginning students scoring significantly higher, thus indicating responses more consistent with the NAEYC standards for primary teaching than the student teachers in the ELED program.

In order to determine if there were any significant differences between the two ELED groups on the “Beliefs” and “Activities” subscales, Multivariate Analysis of Variance (MANOVA) was performed on the subscale scores. The multivariate F was not significant for either the “Beliefs” [$F(1,73) = 0.13, NS$] or “Activities” [$F(1,73) = 2.63, NS$] subscales; therefore, the univariate F s were not examined. Means and standard deviations for the ELED beginning students and student teachers for the “Beliefs” and “Activities” composite and subscale scores are presented in Table 1.

Table 1

ECED and ELED Students' Means and Standard Deviations on the Beliefs and Activities Composite and Subscale Scores for the *Beliefs about Primary Grades Curriculum and Teaching Survey* at the Beginning and End of Their Programs*

	ECED Students				ELED Students			
	Beginning Students		Student Teachers		Beginning Students		Student Teachers	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Beliefs Composite Score	3.75	0.25	3.93	0.28	3.64	0.26	3.61	0.36
Beliefs Subscale Scores								
DAPBM	3.39	0.42	3.57	0.49	3.12	0.52	3.27	0.56
DAPCE	3.94	0.38	3.94	0.41	3.54	0.46	3.59	0.52
DAPCU	3.73	0.36	3.95	0.34	3.86	0.32	3.72	0.41
DAPTS	3.70	0.33	3.87	0.33	3.54	0.30	3.54	0.38
DAPAS	3.82	0.60	4.11	0.43	3.66	0.53	3.77	0.64
Activities Composite Score	3.52	0.29	3.61	0.35	3.37	0.41	3.17	0.33
Activities Subscale Scores								
ABM	3.74	0.42	3.46	0.53	3.39	0.67	3.00	0.64
ACD	4.03	0.40	3.89	0.57	3.81	0.62	3.57	0.47
ATD	2.61	0.62	3.08	0.56	2.62	0.61	2.51	0.49

*DAPBM – behavior management; DAPCE – child expectations; DAPCU – curriculum; DAPTS – teaching strategies; DAPAS – assessment; ABM – behavior management; ACD – child directed; ATD – teacher directed.

In order to answer the third question, 2 (certification) x 2 (year in program) ANOVAs were performed on the “Beliefs” and “Activities” composite scores. The ANOVA on the “Beliefs” composite score yielded a significant F for certification [$F(1,119) = 13.57, p < .001$]. Examination of the means indicated that overall the ECED students scored significantly higher than the ELED students. Neither the year in program [$F(1,119) = 1.74, NS$] nor the interaction [$F(1,119) = 3.27, NS$] was significant.

Analyses on the “Activities” composite score indicated a significant main effect for certification [$F(1,119) = 19.80, p < .001$]. The main effect for year in program was not significant [$F(1,119) = 0.64, NS$]. The analyses also revealed a significant certification

by year in program interaction [$F(1,119) = 5.15, p < .01$]. *Post hoc* analyses using planned comparison t -tests were conducted to determine the nature of the significant interaction. They indicated that while there was no significant difference between the ECED and ELED students at the beginning of their programs [$t(1,119) = 2.14, NS$], there was a significant difference between the ECED and ELED student teachers [$t(1,119) = 24.88, p < .001$]. Examination of the means indicated that the ECED student teachers scored significantly higher than the ELED student teachers. The means and standard deviations for the ECED and ELED students are presented in Table 2.

In order to determine if there were any significant differences between the ECED and ELED beginning

Table 2

ECED and ELED Students' Composite and Subscale Scores on the *Beliefs about Primary Grades Curriculum and Teaching Survey* for Beliefs and Activities*

	ECED Students		ELED Students	
	Mean	SD	Mean	SD
Beliefs Composite Score	3.83	0.28	3.62	0.32
Beliefs Subscale Scores				
DAPBM	3.47	0.46	3.30	0.54
DAPTS	3.78	0.34	3.54	0.35
DAPCE	3.94	0.39	3.57	0.50
DAPCU	3.84	0.37	3.78	0.38
DAPAS	3.96	0.54	3.72	0.60
Activities Composite Score	3.56	0.32	3.25	0.37
Activities Subscale Scores				
ABM	3.61	0.49	3.16	0.68
ACD	3.96	0.49	3.67	0.54
ATD	2.83	0.64	2.56	0.54

*DAPBM – behavior management; DAPCE – child expectations; DAPCU – curriculum; DAPTS – teaching strategies; DAPAS – assessment; ABM – behavior management; ACD – child directed; ATD – teacher directed.

teacher and student teacher groups on the “Beliefs” and “Activities” subscales, 2 (certification) x 2 (year in program) MANOVAs were performed on the subscale scores. The MANOVA for the “Beliefs” subscales indicated a significant main effect for certification [$F(1,119) = 5.53, p < .001$]. Neither the main effect for year in program [$F(1,118) = 0.80, NS$] nor the interaction [$F(1,118) = 1.84, NS$] was significant. The univariate analyses for certification yielded significance for the “Child Expectations” subscale [$F(1,115) = 17.74, p < .001$], the “Teaching Strategies” subscale [$F(1,115) = 13.74, p < .001$], and the “Assessment” subscale [$F(1,115) = 5.46, p < .05$]. Neither the “Behavior Management” nor the “Curriculum” subscales were significant. Examination of the means indicated that in all occurrences the ECED students scored significantly higher than the ELED students.

The MANOVA for the “Activities” subscales indicated a significant main effect for certification [$F(1,118) =$

$6.57, p < .001$] and for year in program [$F(1,118) = 5.64, p < .001$]. The certification by year in program interaction was not significant. The univariate tests for certification showed significant differences on the “Behavior Management” [$F(1,115) = 12.99, p < .001$], “Child Directed” [$F(1,115) = 7.43, p < .001$], and “Teacher Directed” [$F(1,115) = 6.75, p < .01$] subscales. In all instances, the ECED students scored significantly higher than the ELED students. The univariate tests for year in program indicated significant differences for the “Behavior Management” [$F(1,115) = 8.77, p < .01$] subscale. Examination of the means showed that the beginning students scored significantly higher ($M = 3.55; SD = 0.59$) than the student teacher group ($M = 3.15; SD = 0.65$). Neither the “Child Directed” test nor the “Teacher Directed” univariate test was significant. The means and standard deviations for the ECED and ELED beginning students and student teachers for each of the subscales are presented in Table 1.

Discussion

In examining the results of this study, we first want to pay attention to the value of the reported means. They generally ranged between 3.00 and 4.00, on a scale of 1 to 5, with only a few exceptions. The response scaling anchored 3 as “fairly important” or “sometimes, weekly” and 4 as “very important” or “regularly, 2-4 times per week,” for the “Beliefs” and “Activities” scales, respectively. This result indicates that the students tended to endorse both items reflecting the DAP statement and items reflecting more traditional, teacher-directed practices (the latter were reversed for analysis, meaning that the lower the score, the greater the rejection of that practice as important). With all means at and somewhat above the midpoint, students could not be characterized in an “either/or” fashion, as strong proponents either solely for DAP or traditional teaching methods. The lowest means reported were for the “Teacher Directed” activities subscale, which, accounting for the reverse scoring, indicates that students favored these types of activities occurring, on average, between “sometimes” and “regularly.”

Similar to previous research (Buchanan, Burts, Bidner, White, & Charlesworth, 1998; Smith, 1997), we found that ECED student teachers favored less frequent use of teacher-directed activities compared with ELED student teachers. This result was not found with beginning students, who held similar opinions across the two programs, with scores diverging at the end of their programs of studies.

We began our analysis by looking at the two programs individually, comparing students near the beginning and end points of their professional studies. Students in ELED held mostly similar attitudes across the two points in their program. Only the “Activities” composite score was significantly different between the two groups, with student teachers showing less agreement with DAP than beginning students. Several similarities were found as well for beginning and end-point students in ECED. These included the subscales of the “Beliefs” scale, the “Child Directed” activities subscale, and the “Activities” composite score. Yet, differences between the two groups were nested within these attitudes as well. Although the groups scored similarly on the “Activities” composite

scale, student teachers registered significantly less agreement with traditional, teacher-directed activities than did beginning students. And while the subscales on the “Beliefs” scale were not examined individually, due to a nonsignificant multivariate F on the overall scale, student teachers were significantly more in agreement with DAP than were beginning students. Thus, program effects favoring DAP were more apparent with the ECED students than with the ELED students. It should be noted, however, that even as ECED and ELED students began their programs, their average scores were at or slightly above the midpoint. This finding indicates that students were not entering their professional studies with attitudes greatly different from what would be emphasized during their programs.

Similarities in attitudes were found when students in the two programs were compared on the “Behavior Management” beliefs and “Curriculum” beliefs subscales. Ideas about how curriculum should be structured and how the classroom should be managed were alike regardless of certification program. Several areas of difference related to certification option were found as well. Students in ECED, considered across the two points in program, expressed attitudes more aligned with DAP than students in ELED on both the “Beliefs” and “Activities” composite scales, as well as the “Child Expectations” beliefs, “Teaching Strategies” beliefs, “Assessment” beliefs, “Behavior Management” activities, “Child Directed” activities, and “Teacher Directed” activities subscales. These results reflect traditional differences between the two fields, with expectations for homogeneity within the classroom, greater reliance on teacher-directed and whole-group teaching strategies, and more use of testing and workbooks for assessment purposes characterizing ELED more so than ECED. This pattern of both similarities and differences, as well as the relative values of the means, reflects perhaps the evolution of a field, with both change and tradition playing parts in determining students' attitudes.

The analyses also revealed one difference related to time in the program as a main effect. Student teachers, across the certification areas, expressed attitudes less aligned with DAP on the “Behavior Management” activities subscale than did beginning students.

Student teachers advocated more frequent use of strategies such as time-out and external reward systems. This finding is likely related to the dramatic nature of classroom management issues for students moving into a practicing classroom teacher role. In addition, it appears that student teachers may have been inclined to adopt strategies in use in the schools in which they were placed, perhaps because of lack of confidence or feeling inadequately prepared with alternative strategies.

As we considered the implications of these results, questions arose. To what extent are the pressures placed upon public schools a factor in what we found? In the urban school district in which the university is located, direct instruction is a growing trend, and there are discussions about the wider use of standardized testing on a regular basis with the youngest children in the schools. How does this factor affect the ELED program, whose students invariably graduate into this system, in comparison to ECED, where students have placement options both within and outside of the public schools? In the ECED field, do we believe we have resolved these issues, or has the fact that the field had its roots outside of the public school system blunted the effect of these influences on ECED thought and practice?

We found another question raised by the results interesting as well. In ELED, the younger primary grades represent the lower levels of the age range of interest. In contrast, in ECED, they represent the upper levels of the age range being studied. How does this finding affect beliefs and practices? Is there a tendency in ELED to “push down” from older children and a corresponding tendency in ECED to “push up” from younger ones? What are the implications for children?

These questions characterize the heart of what teacher educators do—what do we believe should be happening in classrooms, and where are these beliefs based? It is clear that while students in the two fields were similar, they were not identical in many ways. In spite of the fact that the constructivist underpinnings of DAP are now almost universally espoused, traditional differences continue to influence the fields.

We must express some caveats about this study. First, the examination of beliefs without direct comparison

to either teaching practice or child outcomes is necessarily limited. Pajares (1992, p. 328) asserted, however, that “understanding the beliefs of preservice teachers is essential to teacher education.” An examination of the beliefs of students provides a window to questions about how programs prepare students to make decisions about what and how to teach. Still, inferences about the abilities of students to be effective teachers should not be drawn. Second, the study was cross-sectional, rather than longitudinal. Finally, because only two teacher preparation programs were examined within a single institution, these results should be considered preliminary until extended.

In sum, those responsible for hiring in the public schools face choices, not only related to the flexibility of the certification option, but also related to the expertise those prospective teachers bring with them. Prospective teachers from ECED and ELED are “primed” through their beliefs to shape their classrooms in somewhat different ways. Previous research has indicated that these differences may continue as teachers practice their profession (Buchanan, Burts, Bidner, White, & Charlesworth, 1998; McMullen, 1999). As we continue to explore issues of teacher preparation, we as teacher educators will also be able to shape our programs to reflect our most important beliefs.

References

- Bloch, M. N. (1992). Critical perspectives on the historical relationship between child development and early childhood education research. In S. A. Kessler & B. B. Swadener (Eds.), *Reconceptualizing the early childhood curriculum: Beginning the dialogue* (pp. 3-20). New York: Teachers College Press.
- Bredenkamp, S. (1996). Early childhood education. In J. Sikula, T. Buttery, & E. Grayton (Eds.), *Handbook of research on teacher education* (2nd ed., pp. 323-347). New York: Macmillan. (ERIC Document No. ED400230)
- Bredenkamp, S., & Copple, C. (Eds.). (1997). *Developmentally appropriate practice in early childhood programs* (Rev. ed.). Washington, DC: National Association for the Education of Young Children. (ERIC Document No. ED403023)
- Buchanan, T., Burts, D. C., Bidner, J., White, V. F., & Charlesworth, R. (1998). Predictors of the developmental

- appropriateness of the beliefs and practices of first, second, and third grade teachers. *Early Childhood Research Quarterly*, 13(3), 459-483. (ERIC Journal No. EJ576106)
- Burts, D. C., Buchanan, T., Charlesworth, R., Fleege, P., & Madison, S. (1995). *Teacher beliefs and practices survey*. Baton Rouge: Louisiana State University.
- Day, D. E., & Goffin, S. G. (1994). Early childhood teacher education in context. In S. G. Goffin & D. E. Day (Eds.), *New perspectives in early childhood teacher education: Bringing practitioners into the debate* (pp. 1-14). New York: Teachers College Press. (ERIC Document No. ED382301)
- Delpit, L. (1988). The silenced dialogue: Power and pedagogy in educating other people's children. *Harvard Educational Review*, 58(3), 280-298. (ERIC Journal No. EJ378426)
- Dunn, L., & Kontos, S. (1997). What have we learned about developmentally appropriate practice? *Young Children*, 52(5), 4-13. (ERIC Journal No. EJ547962)
- Goldstein, L. S. (1997). Between a rock and a hard place in the primary grades: The challenge of providing developmentally appropriate early childhood education in an elementary school setting. *Early Childhood Research Quarterly*, 12(1), 3-27. (ERIC Journal No. EJ551026)
- Isenberg, J. P. (2000). The state of the art in early childhood professional preparation. In National Institute on Early Childhood Development and Education, U.S. Department of Education, *New teachers for a new century: The future of early childhood professional preparation* (pp. 17-52). Washington, DC: National Institute on Early Childhood Development and Education.
- McMullen, M. B. (1999). Characteristics of teachers who talk the DAP talk and walk the DAP walk. *Journal of Research in Childhood Education*, 13(2), 216-230.
- National Association of Elementary School Principals. (1990). *Early childhood education and the elementary school principal: Standards for quality programs for young children*. Alexandria, VA: Author.
- National Association of State Boards of Education. (1991). *Caring communities*. Alexandria, VA: Author. (ERIC Document No. ED358908)
- Pajares, M. F. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. *Review of Educational Research*, 62(3), 307-332. (ERIC Journal No. EJ453784)
- Smith, K. E. (1997). Student-teachers' beliefs about developmentally appropriate practice: Pattern stability, and the influence of locus of control. *Early Childhood Research Quarterly*, 12(2), 221-243. (ERIC Journal No. EJ554355)
- Swadener, B. B., & Kessler, S. (Eds.). (1991). Reconceptualizing early childhood education [special issue]. *Early Education and Development*, 2(2). (ERIC Journal No. EJ441900)
- Vartuli, S. (1999). How early childhood teacher beliefs vary across grade level. *Early Childhood Research Quarterly*, 14(4), 489-514.

