Practitioner Confidence and Competence in Early Literacy Learning Practices

Carl J. Dunst
Mary Beth Bruder

ABSTRACT

Findings from a national survey of practitioners' confidence and competence planning and implementing early literacy learning practices with infants, toddlers, and preschoolers with disabilities or delays are presented. Participants were 2,300 Part C early intervention and Part B (619) preschool special education practitioners in 45 States and the U.S. Virgin Islands. Results showed that the largest number of practitioners judged themselves as less confident and capable than was expected. Practitioners' judgments varied considerably as a function of their professional disciplines and somewhat by program type (Part C vs. Part B). Implications for provision of training opportunities in early literacy learning are described.

This *CELLpaper* includes the results from a national survey ascertaining the confidence and competence of Part C early intervention and Part B (619) preschool special education practitioners (early interventionists, teachers, therapists, etc.). The survey included indicators for seven different kinds of early intervention and preschool special education practices,[1] including the respondents' judgments of their ability to plan and implement early literacy learning practices with infants, toddlers, and preschoolers with identified disabilities and those at risk for poor developmental outcomes. The study was conducted at the Center to Inform Personnel Preparation Policy and Practice in Early Intervention and Preschool Education at the University of Connecticut Center for Excellence in Disabilities.

Ascertaining the confidence and competence of early intervention and preschool special education practitioners has been the focus of investigation both before and after the passage of legislation authorizing the provision of services to infants, toddlers, and preschoolers with disabilities or delays (e.g., Bailey, Simeonsson, Yoder, & Huntington, 1990; Carter, 1979; Hutinger, 1981; Miller & Stayton, 2000; Stile & Pettibone, 1981; Winton, McCollum, & Catlett, 1997). This includes both preservice (Bailey, Pal-

sha, & Huntington, 1990) and inservice (Malone, Straka, & Logan, 2000; Sexton et al., 1996) personnel preparation and training, and the assessment of the consequences of efforts to affect changes in practitioner knowledge and skills (Ballantyne, Hansford, & Packer, 1995; Malone et al., 2000).

The particular content areas constituting the focus of personnel preparation and training have tended to shift and vary depending upon the practices that happen to be at the forefront of interest at any one time (Bailey, Simeonsson et al., 1990; Bruder & Dunst, 2005). In the late 1980s and early 1990s, for example, personnel preparation

---

[1] This included teaming, family-centered, assessment, IFSP/IEP, natural environments/inclusion, and instructional practices.

and training in family-centered practices constituted a major emphasis (Bailey, Palsha, & Simeonsson, 1991; Pretti-Frontczak, Giallourakis, Janas, & Hayes, 2002; Winton & DiVenere, 1995). More recently, personnel preparation and training in natural environment practices (Cripe, Hanline, & Daley, 1997; Dunst & Bruder, 2005) and service coordination (Bruder, 2005; Bruder et al., 2005) have been the focus of attention.

One practice that has become the center of attention of personnel preparation and training is early literacy development (Dickinson & Brady, 2006; Dunst, Trivette, Masiello, & McInerney, 2006; Landry, Swank, Smith, Assel, & Gunnewig, 2006). This is the case for many reasons, including, but not limited to, the recognition of the importance of emergent and early literacy learning opportunities as the building blocks for later success in school (Dunst, Trivette, & Hamby, 2007; Hall, Larson, & Marsh, 2003). The *Center for Early Literacy Learning* was recently funded by the U.S. Department of Education, Office of Special Education Programs, specifically to improve the early literacy and language development of young children with disabilities through the provision of technical assistance and training to early intervention and preschool special education programs and practitioners (Dunst, Trivette, Masiello, & McInerney, 2006; Dunst, Trivette, Masiello, Roper, & Robyak, 2006; U.S. Department of Education, 2006).

The provision of early literacy learning opportunities for preschool children, and especially children who are likely to struggle learning to read and write (e.g., Hindson et al., 2005; Katims, 1994), is dependent upon early childhood practitioners being both confident and competent in implementing these kinds of practices. The extent to which this is the case among practitioners working with infants, toddlers, and preschoolers with identified disabilities, developmental delays, and those at risk for poor outcomes, was the focus of the analyses reported in this *CELL paper*. Assessing the confidence and competence of practitioners is important because self-judgments about one's capabilities are strong predictors and determinants of people's behavior and performance (Bandura, 1997; Skinner, 1995).

METHOD

Participants

The participants were 2,300 Part C early intervention (63%) and Part B (619) preschool special education (37%) practitioners in 45 States and the U.S. Virgin Islands. The practitioners were recruited using mailing lists provided by Part C and Part B (619) State Coordinators, the distribution of survey announcements by the Coordinators to programs and providers in their States, direct contacts with early intervention and preschool special education programs and providers, and by postings on the National Early Childhood Technical Assistance Center (NECTAC) listserv.

The survey respondents included early childhood special educators (26%),[2] early childhood educators (15%),[3] special educators (17%), speech and language therapists/pathologists (18%), occupational therapists (8%), physical therapists (5%), psychologists and social workers (7%), nurses and nutritionists (2%), service coordinators (2%), and program administrators (2%) who also provided direct services to program participants. The largest majority of survey respondents were educators and therapists (86%). This percentage is almost identical to that found in the National Early Intervention Longitudinal Study (U.S. Department of Education, 2001). The findings reported in this paper are limited to the three groups of educators and three groups of therapists because these particular individuals were most likely to provide or promote child-level literacy learning services.

Table 1 shows selected background characteristics of the study participants. The largest majority of the survey respondents were female (97%) and White (93%). About two (2) percent of the respondents were Latino and another two (2) percent were African American. The remaining three (3) percent of the participants were American Indian, Asian, Biracial, or another ethnicity.

The ages of the study participants ranged between 21 and 70, with about half of the participants being between 30 and 50 years of age (55%). Nearly all the survey respondents had either bachelor's or master's degrees (94%), where a larger percent of the Part B (619) practitioners had master's degrees compared to the Part C practitioners.

About half of the study participants reported 10 or more years of experience working either in early intervention or preschool education (47%). A larger percent of the Part B (619) practitioners had more years of experience compared to the Part C practitioners. The average caseload or class size of the survey respondents was 15 ($SD = 10$) for Part C practitioners and 22 ($SD = 14$) for Part B (619) practitioners.

Survey

The survey included, for each early intervention or preschool special education practice, two confidence indicators and two competence indicators. Confidence and competence are interrelated but different aspects of one's capacities and capabilities (Colbeck, Cabrera, & Terenzini, 1999; Kawamura, 2007; Stewart et al., 2000). Confidence was assessed in terms of the belief about the likelihood of being able to accomplish a given task (Bandura, 1981; Rodd, 1998). Competence was measured in terms of one's ability to perform or implement a specified task (Fleet & Patterson, 2001; Moyles, 2001).

---

[2] Includes early intervention specialists and developmental specialists.
[3] Includes parent educators and elementary teachers.

Table 1
Selected Background Characteristics of the Survey Respondents

Background Characteristics	Practitioners		Between-Practitioner Comparisons
	Part C	Part B (619)	
Ethnicity			
Caucasian	92	94	$\chi^2 = 5.43$
Other	8	6	
Gender			
Female	97	97	$\chi^2 = 0.67$
Male	3	3	
Age (Years)			
21-30	16	14	
31-40	27	26	
41-50	28	28	$\chi^2 = 5.76$
51-60	27	31	
61 +	2	1	
Education			
High School/AA	3	3	
Bachelor's Degree	38	27	$\chi^2 = 31.06*$
Master's Degree	56	67	
Other	3	3	
Years of Experience			
5 or less	31	26	
6-10	24	22	
11-15	18	21	$\chi^2 = 11.42*$
16-20	13	14	
21-25	11	14	
26 +	3	3	
Caseload/Class Size			
< 10	38	17	
11-20	45	39	
21-30	13	23	$\chi^2 = 220.40*$
31-40	2	11	
41 +	2	10	

* p < .0001.

Table 2 shows the survey items for measuring practitioners' confidence and competence in implementing different literacy learning practices. Each survey item was rated on a 7-point scale ranging from *never do the practice* (1) to *do the practice all the time* (7). Respondents could also indicate that they did not endorse the practice, which was coded *never do the practice*. All surveys were completed online using Survey Monkey (www.surveymonkey.com).

Data Analysis

A practitioner was considered confident or competent if the respondent indicated that he or she used a practice *almost always* or *all the time*, corresponding to ratings of 6 or 7 on the 7-point scale. A stringent criterion was used for establishing a practitioner as highly confident or competent in order to place a respondent on the higher end of a novice-to-expert continuum (Eells & Lombart, 2003; Ericsson & Charness, 1994; Kak, Burkhalter, & Cooper, 2001). [4]

A series of Discipline X Ratings (0-5 vs. 6-7) chi-square analyses were used to determine the similarities and differences in the percentages of practitioners from different disciplines who considered themselves confident and competent in using the four literacy practices (Table 2). The extent to which the Part C and Part B (619) practitioners from the same disciplines were similar or different in their judgments of their confidence and competence was also determined by chi-square analyses. A protected *p*-value (.01) was used to determine significant differences because of the large number of analyses ($N = 24$).

The extent to which different factors influenced the practitioners' judgments of their confidence and com-

---

[4] A self-rating of a 5 on a 5-point scale and a self-rating of a 9 or 10 on a 10-point scale is generally used as a measure of strong endorsement of a belief or opinion. A rating of 6 or 7 on a 7-point scale, therefore, can be considered a reasonable estimate of the confident and competent use of a practice.

Table 2
Early Literacy Learning Practices Survey Items

	Type of Item	
Items	Confidence	Competence
I am pretty good at helping parents provide their children early literacy learning experiences	X	
Including prereading and prewriting outcomes on IFSPs (goals on IEPs) comes natural to me	X	
I am able to get parents to understand why it is important to play sound and word games with their children		X
I make sure I help parents understand and use early literacy learning activities with their children		X

petence was determined by a 6 Between-Practitioner X 2 Between-Program Type X 2 Within Type of Indicator ANOVA with the confidence and competence item scores nested within the type of indicator factor. The dependent measures were the practitioners' ratings on the four literacy scale items.

RESULTS

Between-Discipline Comparisons

Tables 3 and 4 show, respectively, the percentage of confidence and competence indicators that the Part C and Part B (619) practitioners rated a 6 or 7. There were between-discipline differences on all four indicators for the Part C practitioners and between-discipline differences on three of the four indicators for the Part B (619) practitioners. With only a few exceptions, the three groups of teachers and the speech and language pathologists judged themselves as more confident and competent compared to the occupational and physical therapists.

The percentages of Part C and Part B (619) practitioners who judged themselves as confident and competent were generally low for the majority of indicators. The per-

centage of indicators rated a 6 or 7 by the six disciplines ranged between 17% and 45% for the confidence items and 16% and 34% for the competence items. The data were reexamined using 5, 6, or 7 on the 7-point scale as the criterion for considering a practitioner confident or competent. Figure 1 shows the percentage of practitioners from each discipline who met both the stringent and relaxed criterion. Larger percentages of practitioners would be considered confident and competent using the relaxed criterion, but the percentages as a whole were still smaller than expected inasmuch as most people tend to overestimate their capabilities (Dunning, Heath, & Suls, 2004). The percentage of indicators rated a 5, 6, or 7 by the six disciplines ranged between 34% and 71% for the confidence items and 43% and 66% for the competence items.

Part C vs. Part B (619) Comparisons

The appendix includes the 24 between-program comparisons for the six groups of practitioners on each practice indicator. The Part C and Part B (619) practitioners' ratings of their confidence and competence were more similar than different, with only a few exceptions. A larger percentage of Part B (619) early childhood educa-

Table 3
Percentage of Part C Practitioners Using Literacy-Related Practices Almost Always or All the Time

	Confidence Indicators		Competence Indicators	
Practitioners	Good at Helping Parents	IEP Literacy Goals	Encourage Parent/ Child Word Play	Parent Implemented Literacy Activities
Early Childhood Special Education	60	29	28	49
Early Childhood Education	45	20	21	39
Special Education	56	31	26	40
Speech/Language Pathology	55	26	31	47
Occupational Therapy	28	26	16	19
Physical Therapy	26	9	18	20
Between Practitioner Chi-Square	66.21**	22.27**	17.45*	51.95**

* p < .01. ** p < .0001.

Table 4
Percentage of Part B (619) Practitioners Using Literacy-Related Practices Almost Always or All the Time

Practitioners	Confidence Indicators		Competence Indicators	
	Good at Helping Parents	IEP Literacy Goals	Encourage Parent/ Child Word Play	Parent Implemented Literacy Activities
Early Childhood Special Education	52	42	19	39
Early Childhood Education	65	30	25	52
Special Education	50	43	19	40
Speech/Language Pathology	39	27	23	31
Occupational Therapy	11	43	11	7
Physical Therapy	9	10	20	20
Between Practitioner Chi-Square	43.10***	4.23	17.43*	26.40**

* p < .01. ** p < .0001. *** p < .0001.

tors judged themselves as more confident helping parents provide their children early literacy learning experiences compared to the Part C educators, and a larger percentage of Part B (619) early childhood special educators judged themselves as more confident including prereading and prewriting goals on IEPs compared to the Part C educators. In contrast, a larger percentage of Part C speech and language pathologists and therapists considered themselves more competent in promoting parents' understanding and use of early literacy learning activities with their children compared to the Part B (619) pathologists and therapists. The findings taken together indicated the practitioners' ratings of their competence and confidence were more alike than different for the Part C and Part B (619) educators and therapists.

Practitioner Confidence vs. Competence

The ANOVA produced main effects for discipline, $F(5, 1896) = 20.51$, $p < .001$, type of program, $F(1, 1896) = 4.29$, $p < .05$, and type of indicator, $F(1, 1896) = 16.16$, $p < .0001$. The between-discipline main effect indicated that practitioners from different professional backgrounds judged their confidence and competence differently as already noted (see Tables 3 and 4). The between type of program main effect showed that the Part B (619) practitioners ($M = 4.80$, $SD = 1.43$) judged themselves as somewhat more confident and competent compared to the Part C practitioners ($M = 4.70$, $SD = 1.53$). The main effect for type of indicator showed that the practitioners judged themselves somewhat more confident ($M = 4.81$, $SD = 1.56$) than competent ($M = 4.67$, $SD = 1.41$) in implementing the early literacy learning practices.[5]

---

[5] These two main effect differences to a large degree are an artifact of the large sample size in the study. Cohen's *d* effect sizes for these two differences were .07 for the Part C vs. Part B (619) comparison and .09 for the confidence vs. competence comparison.
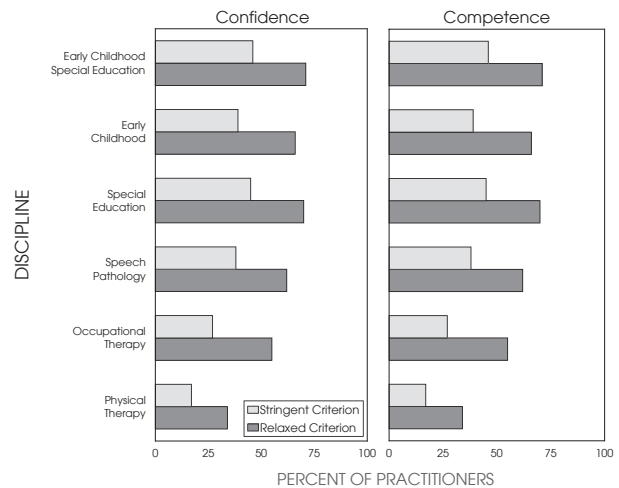

Figure 1. Percentage of confidence and competence indicators rated by the practitioners as a 6 or 7 (stringent criterion) or a 5, 6, or 7 (relaxed criterion) on the 7-point rating scale.

The three main effect differences were qualified by significant type of indicator x type of program, $F(1, 1896) = 29.22$, $p < .0001$, and type of indicator x discipline, $F(5, 1896) = 15.96$, $p < .0001$, interactions. In both cases, the differences in the practitioners' judgments of their confidence and competence varied as a function of their professional backgrounds and whether they worked in a Part C or Part B (619) program. These differences are apparent from close inspection of the findings in Tables 3 and 4 and the Appendix.

Figure 2 shows the findings for the type of indicator x type of program interaction. The Part C and Part B (619) practitioners judged themselves similarly competent, but the Part B (619) practitioners judged themselves as somewhat more confident compared to the Part C practitioners.
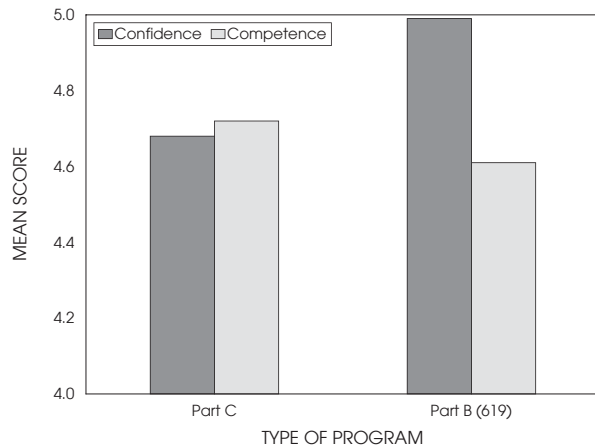
Figure 2. Mean confidence and competence scores for the practitioners in two types of early childhood programs.

Practitioners with more years of experience tended to judge themselves as somewhat more confident.

DISCUSSION

Two major findings emerged from the analyses reported in this *CELLpaper*. First, the practitioners as a whole judged themselves as somewhat less confident and competent than would be expected. Second, the professional backgrounds of the respondents accounted for the largest amount of differences in practitioners' judgments of their abilities to plan and implement early literacy learning activities with infants, toddler, and preschoolers with disabilities or delays. The latter would appear to be the case to a large degree because educators and speech pathologists consider early literacy learning interventions as their responsibility, whereas this is much less the case for occupational and physical therapists.

The most surprising finding was the small percentage of practitioners who considered themselves confident and competent. People in general (Dunning, Johnson, Ehrlinger, & Kruger, 2003; Kruger & Gilovich, 2004), and practitioners in particular (Dunning et al., 2004), more often than not overestimate or inflate self-assessments of their capabilities. That does not appear to be the case in this study. Many of the survey respondents indicated that they neither used the literacy practices nor felt confident in implementing the practices.

Until recently, neither Part C early intervention program practitioners nor Part B (619) preschool special education program practitioners were asked to explicitly target literacy-related outcomes as part of measuring child progress. The U.S. Department of Education, Office of Special Education Programs now requires early intervention and preschool special education programs to assess the language and literacy as part of Part C and Part B (619) progress monitoring (Individuals with Disabilities Education Improvement Act of 2004, 20 U.S.C. § 1400 *et seq*, 2004). This change together with the findings in this *CELLpaper* indicates a need for more practitioner opportunities to acquire knowledge and skills in early literacy learning practices. This is being addressed in *CELL* by the development of evidence-based literacy learning practices (Dunst, Trivette, Masiello, Roper et al., 2006) and the provision of general and specialized technical assistance in the use of the practices (Dunst, Trivette, Masiello, & McInerney, 2006).

CELL investigators and staff are reviewing available research to develop evidence-based practices and make this material available to both practitioners and parents in easy-to-use formats. Nearly 1,000 studies have been identified that are being examined in terms of different kinds of practices and different kinds of literacy outcomes (see e.g., Dunst et al., 2007; Robyak, Masiello, Trivette, Roper, & Dunst, 2007). Both the research reviews and user-friendly practice guides will be available at the *CELL* website (www.earlyliteracylearning.org).

Practitioner confidence and competence is expected to be enhanced, in part, by the availability of *CELL* materials, and especially products that can be easily incorporated into the many different approaches to IDEA Part C early intervention and Part B (619) preschool special education. A big feature of *CELL* materials and technical assistance is the active involvement of practitioners in acquiring knowledge and implementing practices in ways supporting and strengthening their understanding and use of literacy learning practices. The goal is to build the capacity of early childhood practitioners to use evidence-based practices to promote the preliteracy, emergent literacy, and early literacy skills of infants, toddlers, and preschoolers with disabilities and delays.

REFERENCES

Bailey, D. B., Jr., Simeonsson, R. J., Yoder, D. E., & Huntington, G. S. (1990). Preparing professionals to serve infants and toddlers with handicaps and their families: An integrative analysis across eight disciplines. *Exceptional Children, 57*, 26-35.

Bailey, D. B., Palsha, S., & Simeonsson, R. (1991). Professional skills, concerns, and perceived importance of work with families in early intervention. *Exceptional Children, 58*, 156-165.

Bailey, D. B., Palsha, S. A., & Huntington, G. S. (1990). Preservice preparation of special educators to serve infants with handicaps and their families: Current status and training needs. *Journal of Early Intervention, 14*, 43-54.

Ballantyne, R., Hansford, B., & Packer, J. (1995). Mentoring beginning teachers: A qualitative analysis of process and outcomes. *Educational Review, 47*, 297-307.

Bandura, A. (1981). Self-referent thought: A developmental analysis of self-efficacy. In J. H. Flavell & L. Ross (Eds.), *Social cognitive development: Frontiers and possible futures* (pp. 200-239). New York: Cambridge University Press.

Bandura, A. (1997). *Self-efficacy: The exercise of control.* New York: Freeman.

Bruder, M. B. (2005). Service coordination and integration in a developmental systems approach to early intervention. In M. J. Guralnick (Ed.), *The developmental systems approach to early intervention* (pp. 29-58). Baltimore: Brookes.

Bruder, M. B., & Dunst, C. J. (2005). Personnel preparation in recommended early intervention practices: Degree of emphasis across disciplines. *Topics in Early Childhood Special Education, 25*, 25-33.

Bruder, M. B., Harbin, G. L., Whitbread, K., Conn-Powers, M., Roberts, R., Dunst, C. J., Van Buren, M., Mazzarella, C., & Gabbard, G. (2005). Establishing outcomes for service coordination: A step toward evidence-based practice. *Topics in Early Childhood Special Education, 25*, 177-188.

Carter, J. (1979). *Early childhood education for the handicapped: Recommended procedures and practices.* Springfield, IL: Illinois State Board of Education, Springfield Division of Specialized Education Services.

Colbeck, C. L., Cabrera, A. F., & Terenzini, P. T. (1999, November). *Learning professional competence and confidence: The link between instructional practices and learning gains for female and male students.* Paper presented at the Twenty-ninth Annual ASEE/IEEE Frontiers in Education Conference, San Juan, Puerto Rico.

Cripe, J. W., Hanline, M. F., & Daley, S. E. (1997). Preparing practitioners for planning intervention for natural environments. In P. J. Winton, J. A. McCollum, & C. Catlett (Eds.), *Reforming personnel preparation in early intervention: Issues, models, and practical strategies* (pp. 337-350). Baltimore: Brookes.

Dickinson, D. K., & Brady, J. P. (2006). Toward effective support for language and literacy through professional development. In M. Zaslow & I. Martinez-Beck (Eds.), *Critical issues in early childhood professional development* (pp. 141-170). Baltimore: Brookes.

Dunning, D., Heath, C., & Suls, J. M. (2004). Flawed self-assessment: Implications for health, education, and the workplace. *Psychological Science in the Public Interest, 5*(3), 69-106.

Dunning, D., Johnson, K., Ehrlinger, J., & Kruger, J. (2003). Why people fail to recognize their own incompetence *Current Directions in Psychological Science, 12*, 83-87.

Dunst, C. J., & Bruder, M. B. (2005). University faculty preparation of students in using natural environment practices with young children. *Psychological Reports, 96*, 239-242.

Dunst, C. J., Trivette, C. M., & Hamby, D. W. (2007). Predictors of and interventions associated with later literacy accomplishments. *CELLreviews, 1*(3), 1-12.

Dunst, C. J., Trivette, C. M., Masiello, T., & McInerney, M. (2006). Scaling up early childhood intervention literacy learning practices. *CELLpapers, 1*(2), 1-10. Available at http://www.earlyliteracylearning.org/cellpapers/cell-papers_v1_n2.pdf.

Dunst, C. J., Trivette, C. M., Masiello, T., Roper, N., & Robyak, A. (2006). Framework for developing evidence-based early literacy learning practices. *CELLpapers, 1*(1), 1-12. Available at http://www.earlyliteracylearning.org/cellpapers/cellpapers_v1_n1.pdf.

Eells, T. D., & Lombart, K. G. (2003). Case formulation and treatment concepts among novice, experienced, and expert cognitive-behavioral and psychodynamic therapists. *Psychotherapy Research, 13*, 187-204.

Ericsson, K. A., & Charness, N. (1994). Expert performance: Its structure and acquisition. *American Psychologist, 49*, 725-747.

Fleet, A., & Patterson, C. (2001). Professional growth reconceptualized: Early childhood staff searching for meaning. *Early Childhood Research and Practice, 3*. Retrieved August 16, 2007, from http://ecrp.uiuc.edu/v3n2/fleet.html.

Hall, N., Larson, J., & Marsh, J. (Eds.). (2003). *Handbook of early childhood literacy.* Thousand Oaks, CA: Sage.

Hindson, B., Byrne, B., Fielding-Barnsley, R., Newman, C., Hine, D. W., & Shankweiler, D. (2005). Assessment and early instruction of preschool children at risk for reading disability. *Journal of Educational Psychology, 97*, 687-704.

Hutinger, P. L. (1981). 0-6 early childhood handicapped interdisciplinary personnel preparation project. *Illinois School Research and Development, 17*(2), 1-6.

Individuals with Disabilities Education Improvement Act of 2004, 20 U.S.C. § 1400 *et seq* (2004).

Kak, N., Burkhalter, B., & Cooper, M.-A. (2001). *Measuring the competence of healthcare providers* (Operations Research Issue Paper 2). Bethesda, MD: US Agency for International Development (USAID), Quality Assurance Project.

Katims, D. S. (1994). Emergence of literacy in preschool children with disabilities. *Learning Disability Quarterly, 17*, 58-69.

Kawamura, K. (2007). *Confidence and competence in expertise.* Manuscript in preparation. Retrieved August 14, 2007, http://www.nuff.ox.ac.uk/users/kawamura/confidenceCEA.pdf.

Kruger, J., & Gilovich, T. (2004). Actions, intentions, and self-assessment: The road to self-enhancement is paved with good intentions. *Personality and Social Psychology Bulletin, 30*, 328-339.

Landry, S. H., Swank, P. R., Smith, K. E., Assel, M. A., & Gunnewig, S. B. (2006). Enhancing early literacy skills for preschool children: Bringing a professional development model to scale. *Journal of Learning Disabilities, 39*, 306-324.

Malone, D. M., Straka, E., & Logan, K. R. (2000). Professional development in early intervention: Creating effective inservice training opportunities. *Infants and Young Children, 12*(4), 53-62.

Miller, P., & Stayton, V. (2000). Recommended practices in personnel preparation. In M. M. S. Sandall & B. Smith (Eds.), *DEC recommended practices for early intervention / early childhood special education* (pp. 77-88). Longmont, CO: Sopris West.

Moyles, J. (2001). Passion, paradox and professionalism in early years education. *Early Years: An International Journal of Research and Development, 21*, 81-95.

Pretti-Frontczak, K., Giallourakis, A., Janas, D., & Hayes, A. (2002). Using a family-centered preservice curriculum to prepare early intervention and early childhood special education personnel. *Teacher Education and Special Education, 25*, 291-297.

Robyak, A., Masiello, T., Trivette, C. M., Roper, N., & Dunst, C. J. (2007). Mapping the contemporary landscape of early literacy learning. *CELLreviews, 1*(1), 1-11. Available at http://www.earlyliteracylearning.org/cellreviews/cellreviews_v1_n1.pdf.

Rodd, J. (1998). *Leadership in early childhood: The pathway to professionalism* (2nd ed.). New York: Teachers College Press.

Sexton, D., Snyder, P., Wolfe, B., Lobman, M., Stricklin, S., & Akers, P. (1996). Early intervention inservice training strategies: Perceptions and suggestions from the field. *Exceptional Children, 62*, 485-495.

Skinner, E. A. (1995). *Perceived control, motivation, and coping.* Thousand Oaks, CA: Sage.

Stewart, J., O'Halloran, C., Barton, J. R., Singleton, S. J., Harrigan, P., & Spencer, J. (2000). Clarifying the concepts of confidence and competence to produce appropriate self-evaluation measurement scales. *Medical Education, 34*, 903-909.

Stile, S. W., & Pettibone, T. (1981, April). A university-based inservice training model for personnel serving handicapped preschoolers, toddlers and infants in rural areas. In, *Education and related services for young children with special needs in rural America.* Symposium conducted at the Annual Meeting of the Council for Exceptional Children, Division for Early Childhood, New York. (ERIC Document Reproduction Service No. ED210845).

U.S. Department of Education. (2001). *Twenty-third annual report to Congress on the implementation of the Individuals with Disabilities Education Act: Section III. Services received by children and families in early intervention.* Washington, DC: Author.

U.S. Department of Education, Office of Special Education and Rehabilitative Services. (2006). *Federal Register, 71*, 1738-1744.

Winton, P. J., & DiVenere, N. (1995). Family-professional partnerships in early intervention personnel preparation: Guidelines and strategies. *Topics in Early Childhood Special Education, 15*, 296-313.

Winton, P. J., McCollum, J. A., & Catlett, C. (Eds.). (1997). *Reforming personnel preparation in early intervention: Issues, models, and practical strategies.* Baltimore: Brookes.

ACKNOWLEDGMENTS

AUTHORS

Carl J. Dunst, Ph.D., is Co-Director of the Orelena Hawks Puckett Institute in Asheville, North Carolina, and Co-Principal Investigator of the Center for Early Literacy Learning (CELL). Mary Beth Bruder, Ph.D., is the Director of the University of Connecticut Health Center's A. J. Pappanikou Center for Excellence in Developmental Disabilities and Professor of pediatrics and educational psychology at the University of Connecticut School of Medicine.

APPENDIX

Percentage of Part C and Part B (619) Practitioners Rating Themselves as Confident and Competent in Early Literacy Learning Practices

	Practitioners		
Survey Item/Description	Part C	Part B (619)	χ^2
I am pretty good at helping parents provide their children early literacy learning experiences			
Early Childhood Special Education	60	52	3.51
Early Childhood Education	45	65	13.08***
Special Education	56	50	1.48
Speech/Language Pathology	55	39	8.80
Occupational Therapy	28	11	3.53
Physical Therapy	26	9	1.54
Including prereading and prewriting outcomes on IFSPs (goals on IEPs) comes naturally to me			
Early Childhood Special Education	29	42	10.89**
Early Childhood Education	20	30	4.42
Special Education	31	43	5.79
Speech/Language Pathology	26	27	0.85
Occupational Therapy	26	43	3.28
Physical Therapy	9	10	0.25
I am able to get parents to understand why it is important to play sound and word games with their children			
Early Childhood Special Education	28	20	6.04
Early Childhood Education	21	25	0.77
Special Education	26	19	2.58
Speech/Language Pathology	31	23	2.88
Occupational Therapy	16	11	0.35
Physical Therapy	18	20	0.38
I make sure I help parents understand and use early literacy learning activities with their children			
Early Childhood Special Education	49	39	5.84
Early Childhood Education	39	52	5.99
Special Education	40	40	0.02
Speech/Language Pathology	47	31	8.52*
Occupational Therapy	19	7	2.38
Physical Therapy	20	20	0.01

*p < .01. **p < .001. ***p < .0001.