

**EARLY INTERVENTION IN NATURAL LEARNING ENVIRONMENTS: A MODEL  
TO BUILD CAPACITY ACROSS STATE SYSTEMS**

**FINAL REPORT**

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## **Project Summary**

“Early Intervention in Natural Learning Environments: A Model to Build Capacity Across State Systems” was a project of national significance designed to develop, implement and evaluate a training model on the use of natural learning environments in early intervention focusing on systems change. The model encompassed both inservice and preservice materials and activities to support individual states’ Comprehensive Systems of Personnel Development (CSPD). The training audiences were: Part C coordinators, CSPD coordinators, and higher education faculty and other trainers; program administrators and practicing early interventionists; and families. The training content included assessment, IFSP development, intervention and evaluation techniques. The training materials included workbooks, training manuals, course syllabi, slide presentations and videos illustrating each phase of early intervention.

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## **Goals and Objectives of the Project**

### **Objective 1.0 To develop training model**

- 1.1 Convene advisory board
- 1.2 Outline intervention model
- 1.3 Outline modules for intervention phases
- 1.4 Outline training methodology
- 1.5 Outline training products and manual
- 1.6 Develop training modules and workbook
- 1.7 Develop parent handbook
- 1.8 Develop course syllabi
- 1.9 Develop slide presentation
- 1.10 Develop training model manual
- 1.11 Develop website and listserv

### **Objective 2.0 To implement training model**

- 2.1 Provide model materials/activities to advisory board
- 2.2 Schedule training visits to states
- 2.3 Implement train the trainer sessions in states
- 2.4 Supervise the implementation of inservice activities
- 2.5 Supervise the implementation of preservice activities
- 2.6 Use listserv to communicate with states
- 2.7 Institute materials and activities within state CSPDs

### **Objective 3.0 To disseminate training model**

- 3.1 Refine materials and activities
- 3.2 Disseminate materials and activities on website
- 3.3 Recruit additional state Part C systems for training
- 3.4 Add state Part C programs to project listserv
- 3.5 Implement inservice activities in states
- 3.6 Implement preservice activities in states
- 3.7 Institute materials and activities into state CSPDs

### **Objective 4.0 To evaluate project**

- 4.1 Evaluate training materials
- 4.2 Evaluate inservice activities
- 4.3 Evaluate preservice activities
- 4.4 Evaluate dissemination activities
- 4.5 Evaluate training model
- 4.6 Evaluate natural learning environments across states

## Theoretical or Conceptual Framework

### Literature Review for Conceptual Framework

#### a) Content of Model

Promoting and enhancing child development and competence are primary goals of early intervention (see Bond, 1982; Dunst, 1996). Both theory and research indicates that children's acquisition of competence is optimized when they experience learning opportunities having development-enhancing qualities (Bronfenbrenner, 1992; Hunt, 1979). Research also tells us that some of the most important development-enhancing learning opportunities occur as part of the many different kinds of natural learning environments making up the fabric of child, family, and community life (e.g., Bernheimer & Keogh, 1995; Stremel et al., 1992, December; Umstead, Boyd, & Dunst, 1995). **Natural learning environments** are the places where children experience everyday, typically occurring **learning opportunities** that promote and enhance behavioral and developmental competencies.

**Sources of Children's Learning Opportunities.** Children's lives are made up of many different kinds of learning experiences and opportunities having development-enhancing qualities and consequences (Bronfenbrenner, 1979; Bronfenbrenner, 1992; Gallimore, Goldenberg, & Weisner, 1993; Gallimore, Weisner, Bernheimer, Guthrie, & Nihira, 1993; Gallimore, Weisner, Kaufman, & Bernheimer, 1989; O'Donnell, Tharp, & Wilson, 1993; Trivette, Dunst, & Deal, 1997). Learning activities that are development-enhancing are ones that are both interesting and engaging to a child. Activities that have these qualities are ones that in turn promote child competence and a sense of mastery, which further strengthens child interest in learning.

Learning opportunities occur in the context of a child's family, community, and early childhood program(s). The family context includes a mix of people and places that give rise to a variety of different kinds of child learning opportunities, and includes experiences such as eating during meal times, splashing water during bath time, listening to stories, and learning greeting skills at family get-togethers. The same kind of mix is the case in the community context, and includes the people and places experienced on neighborhood walks, playing at a park, children's festivals, nature centers, and so forth. Lastly, learning also occurs in more formal contexts, such as child care programs, early intervention and preschool programs, and other early childhood experiences provided by professionals. Certain learning experiences occur in multiple contexts, whereas other learning opportunities are context specific.

A lesson learned about the many different learning activities occurring in natural environments is that they can be either preplanned where they have specific goals and purposes, or they can occur as the result of opportunities and experiences not having predetermined goals and purposes. Library storytimes, baby exercise classes, and swimming lessons are examples of planned learning activities. Serendipitous learning activities are ones that occur by being in the "right place at the right time." These include such things as "going along" to a ball game with an older sibling, going food shopping with a parent, visiting a neighbor, etc., all of which are likely to include experiences having developmental-enhancing effects. Both kinds of learning opportunities are important for promoting and enhancing child competence and development.

**Natural Learning Environments.** Research and practice by the proposed project directors (Dunst, 1997; Dunst, Bruder, Trivette, Raab, & McLean, 1998; Trivette, Dunst, & Deal, 1997; Umstead, Boyd, & Dunst, 1995) as well as others (Ehrmann, Aeschleman, & Svanum, 1995; Gallimore, Goldenberg, & Weisner, 1993; Gallimore, Weisner, Bernheimer, Guthrie, & Nihira, 1993; Gallimore, Weisner, Kaufman, & Bernheimer, 1989; Sprunger, Boyce, & Gaines, 1985; Stremel et al., 1992, December) indicates that young children with and without disabilities and delays participate in many different kinds of natural social and nonsocial learning environments day-in and day-out, on certain days of the week, at different times of the year, and as part of different kinds of family and community celebrations and traditions. This work helps clarify the meaning of natural learning environments, the learning opportunities available to young children in these learning environments, and the variety of learning opportunities that are likely to occur for individual children. Survey findings from more than 3200 parents of children participating in early intervention, early childhood special education, Early Head Start, Head Start and other early childhood programs throughout the United States (48 out of 50 states), Puerto Rico, and Yap in the Federated State of Micronesia helped identify the different kinds of natural learning environments where child learning takes place. Respondents completed surveys of either family or community life as sources of children's learning opportunities. Each survey included a list of 50 family and 50 community activities. Persons completing the surveys were asked to indicate the extent to which the different activity settings (natural environments) were places where their child(ren) learned desired behavior. Findings (from both exploratory and confirmatory factor analysis) indicate that family and community life are sources of 11 kinds of natural learning environments. What is most obvious from close inspection of the sources of family and community activities is that the possibilities for providing children development-enhancing learning opportunities within and across the 22 different kinds of natural learning environments are quite varied and rich. Moreover, because these are real-life learning contexts, the likelihood that children will acquire functional skills is enhanced considerably.

**Learning Opportunities for Individual Children.** The results from the national surveys, although illuminating, tell only part of the story about the number of learning opportunities potentially available to young children. A study of 124 families in eight states is beginning to clarify the ecology of individual children's learning opportunities and experiences (Dunst, Bruder, Trivette, Raab, & McLean, 1998). The families were carefully recruited so that they were diverse in terms of their cultural, ethnic, and social economic backgrounds; parent and child ages (birth to six); child diagnosis and severity of disability; and place of residence. Findings thus far indicate that young children experience learning opportunities, on average, in about 15 different home locations and 23 different community locations. These locations, in turn, give rise to 87 and 76 home and community natural learning environments, respectively. These learning environments, in turn, result in an average of 113 and 106 learning opportunities in the child's home and community, respectively. Consequently, an individual child can be expected to experience some 200 or more learning opportunities in the context of his/her family and community life beyond those provided as part of a child's involvement in an early intervention or preschool program.

**Situated Learning.** The kind of learning that takes place in natural environments is best described as situated learning (Lave & Wenger, 1991). Situated learning is learning that is

embedded in everyday, natural environments emphasizing the acquisition of competence that is functional and makes possible increased child participation in those environments, both social and nonsocial. Situated learning is learning acquisition of knowledge and skills that have real-life meaning and significance for a developing child. An important characteristic of situated learning is that participation in both social and nonsocial natural learning environments is often a sufficient condition to evoke desired child competence. Natural learning environments that have development-instigating effects make possible the use of a variety of naturalistic response-contingent and response-elaboration instructional strategies (Wolery, 1994; Wolery & Sainato, 1996). Naturalistic instructional strategies are ones where a child is reinforced for engaging in (desired) behavior and for attempting something new or more complex. These kinds of teaching practices are designed to keep a child engaged in production of situated behavior and to promote and enhance the development of new skills and competence.

**Implications for Practice.** Advances in our understanding of the kinds of natural learning environments that occur as part of family and community life provide a basis for broadening the meaning of early intervention and early childhood education. Two things can be said about learning in natural learning environments. First, to the extent that a child's participation in natural environments provides learning opportunities having development-enhancing consequences, the learning opportunities can be said to have functioned as early intervention. Second, learning in the context of natural environments ought to be a practice-of-choice in those instances where the development-enhancing qualities of natural learning environments are known and therefore can be used as a basis for optimizing child benefits. **What is especially appealing about natural learning environments as the contexts for promoting and enhancing child competence is that they are readily available and easily used as sources of children's learning opportunities.**

#### **b) Training Methodology**

There have been many articles (Bruder, 1998; Bruder, Brinckerhoff, & Spence, 1991; Bruder, Lippman, & Bologna, 1994; Bruder & Nikitas, 1992; Stayton & Bruder, 1999; Thorp & McCollum, 1994) and books (Bricker & Widerstrom, 1996; Winton, McCollum, & Catlett, 1997) written on early intervention personnel preparation, yet statewide systems of early intervention continue to struggle with providing effective and appropriate training. System variables including a lack of funding that affects both the scope and a lack of effective models for both preservice and inservice audiences. Additionally, concepts such as natural environments remain both philosophically and logistically challenging for early interventionists who were trained in a traditional early intervention model that emphasized clinical interventions focusing only on children with disabilities in places not having typically developing children.

In order to develop responsive, effective and usable preservice and inservice models for the learners in the twenty-first century, all of our training will be built upon the creation of learning organizations for families, providers, and state leaders while utilizing adult learning guidelines, and applied to early intervention with preservice audiences (Bruder, Brinckerhoff, & Spence, 1991), inservice audiences (Bruder & Nikitas, 1992), higher education faculty (Bruder, Lippman, & Bologna, 1994), and child care providers (Bruder, 1998). Learning communities utilize problem solving techniques to prepare learners for future needs.

We are proposing to foster leadership across the three levels of our project (families, providers, and state leaders) through the creation of learning communities as described in Senge's (1994) work. The core of **learning organization** work is based upon five "learning disciplines" – lifelong programs of study and practice (p. 6). These are: **Personal Mastery** – learning to expand personal capacity to create the results we most desire, and creating an organizational environment which encourages all its members to develop themselves toward the goals and purposes they choose; **Mental Models** – reflecting upon, continually clarifying, and improving internal pictures of the world, and seeing how they shape actions and decisions; **Shared Vision** – building a sense of commitment in a group, by developing shared images of the future, and the principles and guiding practices to get there; **Team Learning** – transforming conversational and collective thinking skills, so that groups of people can reliably develop intelligence and ability greater than the sum of individual members' talents; **Systems Thinking** – a way of thinking about, and a language for describing and understanding, the forces and interrelationships that shape the behavior of systems. This methodology helps us see how to change systems more effectively, and to act more in tune with the larger processes of the natural and economic world.



## Project Status

**Personnel.** Project staff were unchanged from the last reporting period: Mary Beth Bruder, Project Director, Bonnie Keilty, Project Coordinator and Angelo Fazio, Research Assistant responsible for data management.

### **Objective 1.0 To develop a training model on natural learning environments in early intervention.**

A website has been designed for this project and is available through the Center's website at [www.uconncced.org](http://www.uconncced.org). The website was updated this quarter to reflect current activities.

- 1.1 Convene advisory board. Advisory Board members have convened for the Early Intervention in Natural Environments: A Model to Build Capacity Across State Systems three times. Part C Coordinators convened at the Simsbury Inn in Connecticut on September 6 and 7, 2001. The agenda focused on Early Intervention in Natural Environments: A Model to Build Capacity Across State Systems. On Thursday, September 6, the agenda included presentations by Dr. Mary Beth Bruder, Dr. Carl Dunst, and Marybeth Zahorchak. Material presented focused on past research supporting the current model and how to bring it into practice. The afternoon session focused on the implications for the current model within the implementation of the IFSP as well as hearing from each state about their current Comprehensive System of Personnel Development (CSPD) surrounding natural environments.

The agenda on September 7 focused on changing our paradigm of thinking concerning early intervention and natural environments within our current birth to three early intervention systems. With this in mind, each state was asked to complete a Natural Environments: Creating the Most of Learning Opportunities Action Plan. The action plans will be used to individualize the assistance that each state will receive through the National Significance grant. Individuals in attendance for the meeting were: Brenda Choiffi, Carl Dunst, Linda Goodman, Deb Resnik, Charlotte Lewis, Meryl Murphy, Janice Orland, Lynda Pletcher, Pamela Roush, Dathan Rush, Sara Sadler, Maureen Shankweiler, M'Lissa Sheldon, Jan Thelen, Beth Tolley, Marybeth Zahorchak, Mary Beth Bruder, Jill Isenberg, Nancy Gordon, Cindy Mazarrella, Kathy Whitbread, and Tamara Hechtner-Galvin. This group also convened at the Nectac sponsored directors meetings in 2000 and 2001. See Appendix A for a copy of the follow-up plans for those in attendance, Natural Environments: Creating the Most of Learning Opportunities Action Plan form, and material provided during the Early Intervention in Natural Environments: A Model to Build Capacity Across State Systems meeting.

- 1.2 Outline intervention model. The intervention model has been outlined, and it is delineated in the Individualized Family Service Plan (IFSP) training manual in Appendix B.

- 1.3 Outline modules for intervention phases. Each of the modules appears as a chapter in the IFSP manual. These are:
- 1) Identifying Family Concerns, Priorities and Resources: Beginning the Partnership
  - 2) Identifying the Family Activity Settings: The Value of Home and Community
  - 3) Identifying the Strengths and Needs Within Activity Settings: Functional Assessment
  - 4) Developing Collaborative Outcomes: The Team Approach to Maximizing Interventions
  - 5) Promoting the Use of Activity Settings: Adaptations and Supports
  - 6) Assigning Intervention Responsibilities: The Transdisciplinary Approach
  - 7) Developing Intervention Strategies: IFSP Implementation
  - 8) Evaluation Early Intervention: Systematic and Individual Quality Assurance
- 1.4 Outline training methodology. The training methodology to be used will be adapted from Senge's learning communities. The highlights focus on opportunities for learning with an emphasis placed on: 1) guiding influences, 2) what is a learning community and logistics to consider, 3) setting up a learning community, 4) personal mastery, 5) personal mastery and your learning community, 6) mental models: becoming aware of the structure of home and what we learn, 7) shared vision and your learning community, 8) team learning, and 9) systems thinking. A manual describing this process is in Appendix C.
- 1.5 Outline training products and manual. We also completed two modules for preservice training, and these are in Appendix D.
- 1.9 Develop slide presentation. See Appendix E for two samples.

### **Objective 2.0 To implement training model.**

Training has occurred in the following states: Connecticut, Iowa, Michigan, Nebraska, New York, North Carolina, Rhode Island, Texas and Virginia. Appendix F contains a sample process agenda for training, and sample titles for the presentations that were done. Additionally, in order to assess the preservice need for training on natural learning opportunities, we completed two needs assessments of higher education faculty. They are in Appendix G.

### **Objective 3.0 To disseminate training model.**

Project information is being disseminated through the Center's website [www.uconnced.org](http://www.uconnced.org). As materials are finalized, they are placed on the website. A manuscript synthesizing case studies of system initiatives toward natural learning environments was developed. See Appendix H for the manuscript. We also had two manuscripts published from this project:

Bruder, M. B. (2001). Infants and toddlers: Outcomes and ecology. In M. J. Guralnick (Ed.), *Early childhood inclusion: Focus on change* (pp. 203-228). Baltimore, MD: Paul H. Brookes Publishing Co.

Bruder, M. B., & Dunst, C. (2005). Personnel preparation in recommended early intervention practices: Degree of emphasis across disciplines. *Topics in Early Childhood Special Education, 25*(1), 25-33.

These are in Appendix I. Lastly, we created videos of scenes for training purposes. A CD of the videos is available from the project director.

#### **Objective 4.0 To evaluate project.**

Formative evaluation activities have been ongoing by determining that overall project objectives have been met, as well as the objectives set forth by individual systems. See December 2003 quarterly report for formative evaluation narratives for all state training plans. Summative evaluation activities are included for New York, Rhode Island, CREC Birth to Three, and Virginia in Appendix H. In addition, sample consumer satisfaction and plans of action for implementing natural learning environments on one county in New York are in Appendix H. A short description of selected states follows:

**New York.** A survey was created and distributed to all early intervention official directors in New York State to identify what changes have been made in their programs to support implementation of natural learning environments, and their perception of their own expertise and the expertise of the early interventionists in their county (service coordinators and service providers). The survey was returned by 39 of the 107 directors (36.4% return rate).

Overall, the vast majority of early intervention directors reported that they at least understand the terminology of the natural learning environments components of (1) gathering information about activity settings, (2) assessing child participation, (3) developing functional outcomes and integrated objectives, (4) working in a team through collaborative consultation, and (5) applying adaptations, supports and situated learning strategies. The percentage of directors who reported that they were either *trying to institute the terminology* (a 4 rating on a 5 point scale) or *actively taking steps to institute this terminology* (a 5 rating on a 5 point scale) ranged from 32.3% (collaborative consultation) to 51.4% (gathering information), while an additional 25.7% (applying adaptations, supports and situated learning) to 45.7% (assessing child participation) of directors reported that they *understand the terminology and how it works, but could use more information* (a 3 rating on a 5 point scale). These results suggest that most of the directors are confident in their understanding of the content, but more support could be beneficial in implementation.

The directors rated where they perceived most providers (service coordinators and interventionists) in their County to be with regard to knowledge and implementation of the natural learning environments model. The percentage of directors who rated their providers as either *not hearing of the terminology* (a 1 rating on a 5 point scale) or *hearing of the terminology, but questioning how it applies to their work* (a 2 rating on a 5 point scale) ranged from 30.6% (developing functional outcomes) to 55.6% (collaborative consultation). In addition, the percentage of directors who rated the providers as *understanding the terminology and seeing how some of it is related to their work* (at 3 rating on a 5 point scale) ranged from 19.4% (collaborative consultation) and 38.9% (gathering information about activity settings and

developing functional outcomes). These results suggest that providers need more support in understanding and implementing natural learning environments.

The need for more provider support was reiterated in the directors' comments. While many directors identified some level of provider training occurring in their county, including informal training and discussions, showing State videotapes and describing natural learning environments in orientation, more training was most the most frequently cited activity directors would like to do to further institute natural learning environments. Furthermore, the most frequently cited challenge directors identified was supporting providers in changing perspective, understanding the model and increasing provider capacity to implement the model. Alternatively, directors did cite that providers were shifting their perspective and many were committed to the model. These comments, taken together, suggest that providers are moving toward natural learning environments, but long-term, systematic training and support is needed before natural learning environments is instituted and practiced at the local level.

In addition to provider-specific successes and challenges, directors identified another success and another challenge. The most frequently cited success centered on location of early intervention – the home, childcare centers, community settings. These statements suggest that natural learning environments achievements continue to be focused on the *where* of early intervention rather than the *how*, which includes embedding interventions into the experiences or activity settings of the family rather than discrete, provider created contexts.

Directors noted what they have done differently in various aspects of program implementation. Most of the comments were with regard to training. In terms of documentation and paperwork, many directors stated that the IFSP form was revised. Some directors also noted that the intake form and visit/progress notes were revised. There were only a few activities reported under guidelines/policies and procedures, with some activities reported to be in progress. These results suggest that directors have taken active steps to move their system forward however, it appears that more work needs to be done.

**Rhode Island.** Systemic change has occurred in Rhode Island through training, IFSP revision and quality assurance. A survey was created and disseminated to Rhode Island's 200 early intervention providers across the eight early intervention agencies (See Appendix E for survey). Currently 19 surveys have been returned to the UCEDD. More surveys are expected and therefore not analyzed for this quarterly report. The CSPD coordinator also agreed that administrators should be evaluated separately to obtain their unique perspective. She suggested that a variety of options for evaluation would best support administrator participation. This included focus groups immediately after an administrators' meeting and individual phone interviews. Evaluation of administrators' perspectives will be instituted next quarter.

**CREC Birth to Three.** The Assistant Director of CREC Birth to Three identified four objectives to result from the training. There would be an increase in:

1. Parent participation in intervention visits.
2. Interventions conducted in community activity settings.
3. Daily routines written on the IFSP.

#### 4. Contextualized objectives and strategies.

There are three sources of data being collected at the agency level. First, data are being collected for Objectives 1 and 2 through supervisor (Assistant Director) observations of intervention visits. A checklist is completed as well as anecdotal notes that are shared with the provider, with recommendations for future visits. Observations conducted after the final training is completed will be shared with project staff for analysis. Second, data are being collected for Objectives 3 and 4 through IFSP review. The Assistant Director reviews every IFSP for quality and makes recommendations for improvement that are either included in an IFSP revision or discussed with the Assistant Director why a recommendation cannot be implemented. The IFSP reviews, as well as the IFSPs themselves, both before and after training implementation, will be shared with project staff for analysis. Third, all early interventionists at CREC Birth to Three have identified professional development goals with the Assistant Director. These goals are reviewed every 6 months. The review of these goals in relation to natural learning environments implementation will be shared with project staff. The Assistant Director has not yet compiled this data for project staff to review.

In addition, project staff created and disseminated a survey to the 40 providers and contractors at CREC Birth to Three (See Appendix F for CREC survey). Since the assistant director was hoping that the competencies of those who attended the trainings would “spill over” to those who did not attend the trainings, all CREC providers were surveyed regardless of whether or not they attended the trainings. Currently, 9 surveys have been returned – six from those who attended the trainings and three from those who did not attend the trainings. More surveys are expected and therefore not analyzed for this quarterly report.

**Virginia.** The needs assessment conducted this summer provided information on providers’ ability to implement natural learning opportunities into practice. Out of the 420 needs assessments mailed out, 91 (22%) were returned. For each of the five statements on different aspects of the natural learning environments model, mean scores ranged from 3.52 to 3.77 (out of 5). These average scores lie between the statements, *I understand the terminology and am willing to try implementing it in my work* and *I am comfortable implementing the terminology in my work*. These mean scores suggest that the providers obtained some knowledge of the natural learning environments model, but perhaps not enough to comfortably or effectively apply the model in working with families. The percentage of respondents who rated their comfort in implementation at a five (*I am implementing the terminology in my work and willing/comfortable to train others*) ranged from 15.1% (*Working in a team through collaborative consultation and the primary service provider model to identify team member roles and responsibilities and implement interventions*) and 19.4% (*Gathering information about activity settings, learning opportunities and child participation in activities settings as part of the evaluation and assessment process*). Clearly, the majority of respondents do not feel ready to support other providers in the model.

One theme that emerged consistently to the question “What have you felt successful in implementing with regard to natural learning environments?” is the use of daily routines, activity settings and family materials during intervention visits. Forty-six (60.5%) of the respondents identified successes around intervention occurring in the home, community locations, identifying

activity settings, using materials in the home and integrating “therapy” into the daily routine. Challenges to implementing natural learning environments included writing functional outcomes, especially aligned with insurance billing, and family understanding and buy-in of the natural learning environments model. Writing outcomes was identified by 25% (n=21) of the 84 respondents. Thirty-five respondents (41.6%) felt that families had a hard time understanding the use of activity settings and that many families do not want to participate in interventions. While providers identified the use of natural learning environments in interventions, their concern about family participation suggests that they are not truly using natural learning environments as the authentic activities and experiences occurring, but perhaps creating contrived interventions within the natural environment as a location, controlled by the interventionist rather than the family. See December 2003 for evaluation data.

**Columbia County, NY.** Consumer satisfaction forms were completed by 21 participants of Part II of the natural environments training. Mean satisfaction ratings (5-point scale) ranged from 3.90 (*I learned enough to implement the concepts into my work and My questions about the topic presented were answered*) to 4.81 (*The presenters were knowledgeable in the subject, The presenters were easy to listen to, and The presenters valued our input*). It is not surprising that participants did not strongly agree that they had learned enough to implement the concept into their work as the training was designed as an introduction where follow-up support to successfully implement would be required. In addition, this second part of the training really emphasized the practical aspects of natural learning environments. Therefore, it appeared that there were more questions regarding both logistics and actual shift in practice within the Columbia County system in the Part II rather than the Part I training. All respondents stated that they would use the UCE again. Examples of comments regarding the most helpful aspects of the training included discussions with other providers and the new ideas and approaches presented. The participants reported that the training would have been better if there were more examples, including IFSPs, and if they knew that there was backing of program and County administrators. Participants cited working with families as the way they would use the knowledge and skills learned in the training. See Appendix G for consumer satisfaction data.

At the end of this training, the participants were asked to reflect on their action plan from the first session and document what they have done, and what next steps will be taken. Many participants identified decreasing in the amount of toys and equipment being brought to intervention visits and trying to explain natural learning environments to families. Common next steps centered on families and teaming. Family next steps included engaging in conversations with families to identify outcomes, supporting parents in understanding how intervention can be integrated into family activity settings, and supporting families in participating in interventions. Teaming next steps included collaborative visits, discussions and phone calls, and to advocate for teaming as an essential part of quality early intervention. These next steps suggested that the providers have moved significantly in their perspectives of working with families and discussing natural learning environments in early intervention. In addition, their value of teaming was exemplified despite the system constraints to teaming easily. See Appendix H for full results.

Since this training, the early intervention official leading the systems change initiative has left her Columbia County position. It was decided that no further steps would be taken in systems change efforts at the current time, including IFSP revision.

## **Conclusion**

One indicator of the project's impact is the fact that the Early Childhood Outcomes Center was influenced by the field to recommend outcomes for all Part C and B (619) programs that reflected the purpose of this project. Rather than report outcomes by domain, ECO recommended three outcomes that cross domains and disciplines and reflect functional outcomes for children. These were then adapted for Congressional reporting purposes by OSEP. The three outcomes are:

1. Positive social emotional skills (including positive social relationships)
2. Acquisition and use of knowledge and skills (including early language/communication [Part C] and early literacy [Part B] preschool)
3. Use of appropriate behaviors to meet their needs

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