Early intervention with infants, toddlers, and their families is a specialized area of occupational therapy practice, which tends to be superficially addressed in many basic professional occupational therapy programs. Most therapists rely on continuing education and on-the-job training to acquire the specialized knowledge and skills required for effective early intervention practice.

In response to the increasing demand for qualified occupational therapists to provide early intervention services to infants and toddlers with disabilities and their families, a federally funded 3-year program was developed and implemented by Hinojosa and Anderson (1989) at the State University of New York Health Science Center at Brooklyn (SUNY/HSCB). Development was based on a model of professional socialization and the concept of competency-based education. One major goal of the program was to develop competencies to enable occupational therapy students to provide family-centered intervention based on an Individualized Family Service Plan (IFSP). The second goal was to provide occupational therapy supervisors with the advanced knowledge necessary to supervise and train occupational therapy students in early intervention services. The overall intent of the program was to train entry-level occupational therapists to deliver quality early intervention services to infants and toddlers with disabilities and their families. This paper describes the "Occupational Therapy: Early Intervention Preservice Training Program," its content, the participants, and their feedback.

Development of the Program

Professional Socialization

Principles of professional socialization guided the development of this training program. Professional socialization is the process through which entry-level therapists acquire and internalize the values, norms, roles, and skills that will enable them to function in specific professional roles (Sabari, 1985, 1992). Preparation for competent occupational therapy practice in early intervention requires learning relevant factual content, theories, and skills; the behavior patterns and norms associated with professional practice; and the values and attitudes that characterize occupational therapy early intervention. It also requires developing a professional self-image by internalizing the skills, behavior, values, and norms of professional practice (Hinojosa & Anderson, 1989).

In the process of professional socialization, a role model's influence on the student is strongest when there is maximum opportunity for interpersonal contact (Weiss, 1981) and when students perceive the socializer as being highly competent in performing professional tasks (Reid, 1981). In occupational therapy, clinical supervisors may be more powerful role models for students
than academic faculty members. Students are most likely to develop positive opinions about the professional competence of those role models whom they observe engaging in direct clinical practice and meeting the day-to-day practice demands of providing occupational therapy services. Academic faculty members, knowing the potential influence of clinical supervisors, developed the workshops to enhance supervisors’ awareness of their power as role models.

Because a socialization process works best in an educational program with clear objectives and goals (Brim & Wheeler, 1966; Martins, 1988), the program was organized upon clearly delineated competencies and learning activities that were shared with all participants.

Consistency between clinical and academic role models is a critical factor for ensuring positive reinforcement of socialization goals and acceptance of values (Ondrack, 1975). When the roles and values advocated in the clinical setting are similar to those advanced in the classroom, entering professionals are more likely to embrace these values in their future practice (Ichilow & Dotan, 1980; Lurie, 1981).

These principles of reinforcing socialization were incorporated into the program. For example, a core value of family-centered intervention emphasized in this program was that parents are partners in the intervention process (Anderson & Hinojosa, 1984; Hinojosa & Anderson, 1991). To ensure that students heard the values of family-centered intervention not only in the classroom but also during fieldwork, their clinical supervisors were exposed to the values in workshops held before the student fieldwork experiences. For example, supervisors learned the specific goals of the program related to the values of family-centered intervention as well as information about new ideas and trends in early intervention. They were also given opportunities to help plan the curriculum to ensure that their socialization messages would be consistent with those of the academic faculty members. Another reinforcer was the link that the program faculty members maintained with the clinical supervisors for the duration of the program through site visits and frequent telephone contact.

An effective socialization program provides students with opportunities to learn from peers, clients, and others, in addition to traditional instruction and mentorship from teachers and supervisors (Becker, Geer, Hughes, & Strauss, 1961; Lacey, 1977). In the training program, these opportunities were structured via student workshops, seminars, and assignments. The workshops provided problem-solving experiences, which included group discussion and role playing in the provision of family-centered intervention. Workshops also were used to discuss the assignments completed at the clinical sites, thus giving students an opportunity to assess the effectiveness of their various interventions, with input from peers and faculty members. Finally, peer networking was encouraged so that students might independently discuss relevant clinical issues.

**Competency-Based Education**

Professionals are competent when they have the qualifications, expertise, and ability to perform in a particular situation at a specified standard. Criteria for best practice in early intervention for occupational therapy services were identified from the literature and the grant authors’ clinical experiences (Hinojosa & Anderson, 1989). These criteria served as a basis for the development of specific competencies, stated in behavioral terms, for both students and supervisors. These competencies then guided the development of specific learning strategies for students and supervisors who participated in the program.

Competencies developed for entry-level occupational therapists (students) specializing in early intervention are listed in Appendix A. For each competency, activities were suggested to accomplish each objective and were designed to be carried out during the six workshops and the fieldwork experiences. An example of a competency statement including behavioral objectives and related learning activities for students appears in Appendix B.

Similar competencies and an example of behavioral objectives for supervisors are presented in Appendix C and Appendix D. These competencies emphasize attainment of skills essential for assisting families and caregivers to help their children grow and develop.

**Program Structure and Content**

The program consisted of two interwoven phases. Phase I was the training of occupational therapy supervisors, who were selected on the basis of expertise in early intervention and agreement to implement this competency-based specialty Level II fieldwork program. The supervisors were then carefully matched with students on the basis of individual students’ stated learning styles, goals, and needs. Phase I consisted of two full-day workshops, held 4 to 6 weeks before the student fieldwork experiences, which provided information relating to early intervention services and special instruction on enhancing student learning during fieldwork. Workshop content included:

- review of early intervention legislation (Education of the Handicapped Act Amendments [Public Law 99-457], 1986) and its implications for clinical practice and provision of early intervention services in occupational therapy
- discussion of relevant student clinical experiences and role-playing supervisory techniques
- discussion of principles and practice in family-centered intervention
- discussion of the development and implementation of the IFSP.
Phase II, the training of occupational therapy students, included academic and clinical education related to early intervention services and was held concurrently with a 12-week Level II fieldwork experience in early intervention. Various early intervention facilities were used for the fieldwork experience, including neonatal intensive care units, inpatient and outpatient settings, and preschools. This specialized fieldwork experience was optional and followed successful completion of the required 6 months of Level II fieldwork in physical disabilities and mental health.

Full-day workshops were held for students once a week during the first 6 weeks of the fieldwork experience. Workshop content consisted of an examination of relevant pediatric frames of reference and a review of specific intervention procedures, including physical handling techniques, activity modification, and environmental adaptation. Additional content included:

- early intervention legislation and its implications for practice
- values and principles of a family-centered philosophy
- development and implementation of an IFSP

Each workshop also included a seminar, conducted by the project director, which gave students an opportunity to discuss their concerns about their fieldwork experiences and the supervisory process.

Participants

Eighteen supervisors from facilities in the New York metropolitan area participated in the program. Their clinical experience in early intervention ranged from 1 to 18 years with an average of 7 years experience as occupational therapists. Eight had bachelor's degrees and 10 had master's degrees. All supervisors were women. In describing their full-time clinical commitments, they reported that they spent an average of 5.4 hr per week supervising students and 20.3 hr per week in direct intervention.

Twenty-nine occupational therapy students pursuing a bachelor of science degree participated in the program. Sixteen were from the State University of New York, Health Science Center at Brooklyn and 13 were from Kean College, Union, New Jersey. All students received tuition assistance and a stipend while participating in this program.

Program Feedback

Feedback from participants was collected to assess the satisfaction of the participants, the usefulness of the training program, and to determine ways to improve this or similar programs in the future. Ten supervisors participated in years one and three of the 3-year program; 9 participated in year two. Several supervisors participated in more than one year, resulting in 18 different supervisors who provided feedback at the end of each of their workshops. Additional feedback was collected from participants in the second and third years of the program through follow-up telephone and mail surveys. Six of the nine supervisors (67) in the second year and 7 of the 10 supervisors (70) from the third year returned surveys. Because one of these supervisors participated in the program in both years, this resulted in a total of survey feedback from 12 different supervisors.

All 12 supervisors stated that topics addressed by the program for both students and supervisors were important and relevant considering current practice in early intervention. They identified that previous students who had not participated in this program often had failed to develop a clear understanding of the unique roles and functions of occupational therapists who provide early intervention services. They agreed that a family-centered focus was important as the basis for developing appropriate occupational therapy interventions. They thought that their participation in the program validated their views, opinions, and attitudes toward providing comprehensive services to children with disabilities and their families. They stated that participation in the program broadened their understanding and appreciation of family-centered care and improved their supervisory skills. Supervisors commented that they specifically benefited from their ongoing, active interaction with the academic faculty members through workshops, telephone contact, and field visits. They agreed that the consistency of role modeling and expectations between the academic and clinical phases of the program were critical to their satisfaction with the training program.

Student feedback was collected through written program evaluation at the end of each year, through verbal feedback during each seminar, and through a telephone survey conducted at the end of the 3-year program. For the telephone survey, 25 (79.3%) of the 29 students were located and interviewed, 14 from SUNY/HSBC and 9 from Kean College. Sixteen students (70%) reported that they received appropriate supervision in all areas included in the supervisor's competencies. Twenty-two students responded that the topics presented in the workshops were clinically useful in their fieldwork facilities. Students reported that participation in the program helped them to refine their skills in infant and family assessment and intervention planning. Most stated that they gained knowledge and skills in the use of a variety of appropriate frames of reference. Eighteen students (78.3%) thought that the workshops and the structured clinical experiences helped them to adapt intervention environments and activities to meet family-centered goals. Twenty-one (91.3%) thought that they had gained an understanding of family-centered early intervention and the IFSP. All students reported that the training activities helped them to clarify the role of occupational therapists in early inter-
vocation, as well as increase their knowledge of laws, rules, and regulations affecting this practice area.

When asked to identify the most positive aspects of the program, students mentioned the variety of topics presented at the workshops, the combination of fieldwork and workshop experiences, and the feedback and support provided by interactions with the other students. A few students thought that the program was too short and that the workshops could be strengthened with additional laboratory time to practice specific treatment techniques. All students stated that participation in the program increased their confidence, knowledge, and skills related to working with young children and their families. They also reported that they felt more competent in working in collaboration with other professionals.

Both supervisors and students reported satisfaction with the workshops. Topics were consistently rated as important and relevant. In fact, some supervisors requested that they be allowed to attend student workshops, perhaps because the speakers were recognized as experts in the areas in which they presented. Ten supervisors (83.3%) stated that they had gained new knowledge and information and were better able to identify expected performance outcomes of student training. Nine of the supervisors (75%) stated that they developed a better understanding of how federal laws, rules, and regulations apply to early intervention occupational therapy services. Eleven supervisors (91.7%) stated that their workshops were clinically relevant and that they were able to apply the knowledge they gained.

Of the 23 students surveyed by telephone, 20 (87%) were employed in December 1992 as full-time therapists in early intervention facilities. Eleven of these were employed in an early intervention preschool, six in hospital-based settings, three in supervised school-based programs, and three in private practice settings under contractual agreements. The three student participants not working in pediatrics reported working in adult rehabilitation settings.

Summary and Recommendations

This paper described a preservice training program developed to prepare entry-level occupational therapists to work in early intervention settings. Principles of competency-based education and professional socialization guided the development of the program as well as the competencies and expected behavioral outcomes for both supervisor and student participants. The program had two major goals: (a) training students to develop competencies in providing specialized occupational therapy services in early intervention; and (b) training occupational therapy supervisors to supervise students in early intervention.

All 29 students successfully completed this specialty Level II fieldwork experience. Each student achieved expected outcomes as identified in the competency statements, with the exception of the IFSP. The anticipated IFSP dilemma was that, although Public Law 99-457 required the development and implementation of the IFSP, New York State did not require the use of IFSPs from 1989 through 1992, during the operation of this program. Thus, students frequently did not have the opportunity to develop and implement an IFSP in their fieldwork settings, as only seven of these facilities were actually implementing the IFSP by 1992, when the program concluded.

Some weaknesses of the program emerged in reflection upon the program design and implementation. First, scheduling of workshops to guarantee attendance of all participants was difficult. Supervisors were reluctant at times to release students from clinical responsibilities so they could attend all six sessions. A few supervisors had difficulty being released from their clinical duties to attend workshops. Second, the program was more labor intensive for faculty members and program administrators than was originally envisioned, possibly because of the incorporation of students from two universities.

The program might be strengthened with the following changes:

- scheduling workshops to maximize participation, e.g., late afternoons or weekends
- including some joint workshops with supervisors and students to allow intervention and supervisory issues to be more effectively addressed
- including more student assignments to be completed in the clinics to minimize time spent on assignments in workshops
- maintaining adequate student seminar time to deal with all the issues raised, even if total workshop time must be reduced
- increasing supervisory training time to accommodate supervisors with less experience in student supervision.

Future work should focus on assessing the program's effectiveness, assessing changes in students' and supervisors' values and behaviors, and measuring achievement of competencies.

Acknowledgment

Occupational Therapy Early Intervention Training Program was funded by the U.S. Department of Education, Grant #H102P900098, 1989-1992.

Appendix A

Competencies for Entry-Level Occupational Therapists

**Competency E1.0: Assessment**

E1.0 Demonstrate the ability to select, administer, and interpret selected screening and evaluation tools for infants, toddlers, and their families.

**Competency E2.0: Implementation of Treatment Techniques**

E2.0 Demonstrate entry-level skill in the implementation of
Appendix C
Competencies for Occupational Therapy Supervisors

Competency 51.0: Supervision
S1.0 Demonstrate ability to supervise entry-level occupational therapists in their interventions with infants and toddlers with disabilities and their families.

Competency 52.0: Laws, Regulations, and Rules
S2.0 Demonstrate ability to comprehend and explain laws, regulations, and rules governing early intervention services and their implications for occupational therapy practice.

Competency 53.0: Roles and Functions
S3.0 Analyze and describe for the entry-level occupational therapists the roles performed by occupational therapists in providing early intervention services.

Competency 54.0: Values and Principles of Family-Centered Intervention
S4.0 Communicate the values and principles of family-centered practice and effective methods of collaborating with families of children with disabilities.

Note. IFSP = Individualized Family Service Plan.

Appendix D
Competency S4 for Occupational Therapy Supervisors

Competency 54.0: Values and Principles of Family-Centered Intervention
S4.0 Communicate the values and principles of family-centered practice and effective methods of collaborating with families of children with disabilities.

S4.1 Explore and analyze for entry-level therapists the effect of the disability on family units and consider the effect of such variables as the nature of the family constellation, socioeconomic class, ethnicity and culture, and personal factors.

S4.2 Compare and contrast the consequences of collaborative and noncollaborative relationships between occupational therapists and families.
collaborative relationship.
b. Participate in a discussion on collaborative versus authoritative interactions.

S4.3 Define collaboration as it applies to the relationship of the occupational therapist and the family of the child with a disability.
a. Participate in a small group discussion of collaboration and partnership when working with families.

S4.4 Describe methods of collaboration with families that have been found to be effective.
a. Participate in a small group discussion of personal difficulties in working with selected families, and propose effective methods of collaborating with them.

S4.5 Formulate some ways to respond to families of children with disabilities that are consistent with a family-oriented philosophy.
a. Participate in a small group discussion in which they ask for suggestions and recommendations for dealing with a problem case of their own.
b. Select one case from those presented and role play a parent-therapist interaction.

References


