School-Based Practice: Acquiring the Knowledge and Skills

Sharon Brandenburger-Shasby

The purpose of this descriptive study is to investigate the perceptions of occupational therapists working in school-based settings regarding their level of preparation for practice. The Survey of School-Based Practice was mailed to 1,102 occupational therapists working in school-based practice (SBP) throughout the United States. The mailing was based on a random sampling of 20% of the School System Special Interest Section of the American Occupational Therapy Association. Results were based on 450 returned completed surveys representing a response rate of 41%. The results were analyzed according to the respondents years of experience in SBP, entry (less than 3 years), transitioning from another practice setting with less than 1 year in SBP, and experienced with 3 or more years experience in SBP. The results indicated the majority of occupational therapists perceive themselves to be poorly prepared for this practice area based on entry-level education alone. Statistically significant differences were seen between continuing education needs and level of experience in SBP. Continuing education and mentoring were most often listed by therapists as preparing them for SBP. Implications for the profession are discussed.


Since its beginning in the United States, occupational therapy has changed from a profession working primarily in acute medical–rehabilitation and psychiatric settings to contemporary practice arenas. Reflecting these changes, it is estimated that 25% of the profession identifies school settings as their area of practice (American Occupational Therapy Association [AOTA], 2003). Occupational therapy in school settings is shaped by an educational model with language, goals, and objectives very different from those of medical-model settings (Hanft & Place, 1996).

School-based practice (SBP) requires a set of skills and knowledge unique to both occupational therapy and school settings. Recent literature has addressed many of the skill and knowledge areas used by occupational therapy practitioners in educational settings. Some of these include intervention using an inclusion model (Kellegrew & Allen, 1996), individual and environmental accommodations (Hemmingsson & Borell, 2000), data-based decision making (Clark & Miller, 1996), transitioning young children from early intervention to school-based settings (Tanta, Heistand, Adams, & Sparks, 2000), transitioning students from school to adult life (work) (Orentlicher & Michaels, 2000a; 2000b), and collaborative teaming (Barnes & Turner, 2001).

An important factor contributing to the resilience of a profession during times of change is the way it modifies its entry-level programs and provides continuing education opportunities to meet the demands and requirements of new service environments. However, as practices and practice settings for occupational therapists have changed in response to federal and state legislation and health care policy, concerns regarding the professional preparedness of occupational therapists in SBP have
been documented (Bergson, 1996; Brandenburger-Shasby & Trickey, 2001; Chandler, 1998; Griswald & Strassler, 1995; Kaplan & Porway, 1988; Powell, 1994; Rainville, Cermak, & Murray, 1996; Rourk, 1996; Whitworth, 1994). Little is known of how effectively the entry-level preparation of occupational therapists and continuing education opportunities have responded to changes in the knowledge base required for the shift to SBP.

Professional preparation encompasses a variety of classroom and practical experiences in an effort to gather the information and skills needed to practice in the field. Winton, McCollum, and Catlett (1997) defined preservice (professional) preparation as: “all strategies (e.g., mentoring, consultation, self-study, guided decision making) and processes (e.g., personnel standards, licensure, certification, competencies) that create a community of learners with the capacity to grow and develop in the face of ongoing changes in the field” (p. xv). This preparation is dependent upon the criteria established for performing the knowledge, skills, and abilities of that profession. Two professional documents significant in the design of entry-level occupational therapy curricula are the Standards for an Accredited Educational Program for the Occupational Therapist (AOTA, 1998) and Guidelines for Pediatric Curriculum Content for Occupational Therapy Entry-Level Curricula (AOTA, 1999).

The Standards for an Accredited Educational Program for the Occupational Therapist (Standards; AOTA, 1998) provide a framework for content and process decisions within a curriculum, but allow each academic institution the freedom to design a program reflective of the philosophy and mission of the institution. The Standards therefore leave to the discretion of each program the amount of school-based content to include as well as whether or not clinical experiences are provided in this area of practice.

The Guidelines for Pediatric Curriculum Content for Occupational Therapy Entry-Level Curricula (Guidelines; AOTA, 1999) are intended to address minimal content requirements for generic entry-level into pediatrics for occupational therapy practitioners. Reviewing authors of this document “considered Level II fieldwork as an essential part of the preparation for entry-level practice in pediatrics” (p. 3). The Guidelines recommend course content reflective of SBP systems, however, they are only guidelines and not requirements for educational preparation of occupational therapists.

The Guidelines together with the Standards are intended to provide entry-level programs with direction for designing content and preparing occupational therapists for entry-level practice in school-based settings. However, recent graduates employed in SBP report not feeling prepared to practice in an educational setting (Brandenburger-Shasby & Trickey, 2001; Powell, 1994; Rainville et al., 1996). Additional concerns from practitioners and administrators have also been expressed about the inadequacies of entry-level education particularly in regard to Level II fieldwork (Griswold & Strassler, 1995; Whitworth, 1994). There is little research regarding the effectiveness of entry-level occupational therapists in SBP. There is neither an AOTA requirement nor an Accreditation Council for Occupational Therapy Education (ACOTE) standard for what a SBP therapist should know or have the skills to perform prior to accepting employment in an educational setting. Further, no guidelines for recommended continuing education topics during the entry years of SBP exist.

Therapists have expressed concerns and opinions as to whether or not working in an educational setting is in fact an entry-level area of practice (Bundy, 1997; Chandler, 1995; Kaplan & Porway, 1988; Whitworth, 1994). Historically, AOTA’s 1993 School-Based Practice Survey (AOTA, 1994) indicated that 91% of the respondents were working in the school system without any further required entry-level education. However, many of our most experienced practitioners and educators (Amundson, 1995; Bundy, 1997; Chandler, 2001; Griswold & Strassler, 1995) have suggested guidelines and recommendations for requiring either pediatric or school-based fieldwork prior to entering this practice arena. Based on the concerns represented in the literature, one might ask at what point in professional education does a therapist develop the competencies to be successful in entry-level SBP?

To address this question, this descriptive study was completed to investigate the perceptions of occupational therapists regarding their preparedness for SBP and identify the entry-level and continuing education needs of school-based occupational therapists. The following questions were used to guide this investigation:

1. What school-based entry-level training did occupational therapists currently working in SBP receive (i.e., classroom instruction, fieldwork experiences)?
2. What continuing education needs are identified by school-based occupational therapists?
3. What experiences do occupational therapists perceive as having prepared them for SBP?
4. Reflecting on entry-level education alone, how well do occupational therapists perceive they were prepared for SBP?

Method

Participants

The participants were occupational therapists randomly selected from the AOTA School System Special Interest Section (SSSIS). Occupational therapists employed as faculty in
academic settings were excluded from the SSSIS list prior to sampling as these therapists may not have been working in school-based settings, but joined the SSSIS for educational purposes. One thousand one hundred and two or 20% of the remaining 5,506 SSSIS members were mailed the Survey of School-Based Practice (SSBP).

Instrument

The SSBP is a 25-item questionnaire related to professional preparation, including entry-level and continuing education, professional experience, and the perceptions of school-based occupational therapists preparedness to practice in the school setting. The items included on the survey were selected by the author based on knowledge and skills identified in the literature as essential to the success of occupational therapy practice in school-based settings. The survey included 21 closed-ended questions regarding forced choice or yes or no responses and four open-ended questions.

The survey was developed with feedback from the author’s doctoral committee members, occupational therapists currently working in SBP, and therapists teaching in occupational therapy educational programs. The research ethics review committee at the University of South Carolina approved the procedures used in this study. The survey was administered to a pilot group of 10 occupational therapists teaching in occupational therapy education programs or who had worked for 10 or more years in SBP. Based on their recommendations, modifications were then made to the survey design. Thus the survey is thought to have adequate face and content validity although no other psychometrics were conducted.

Data Collection

The survey was sent with a requested response time of 1 month. A self-addressed stamped envelope was included. An incentive to return the questionnaire was included at the bottom of the last page: registration for a drawing for a free AOTA membership and for a state association membership. The surveys were coded to determine the need for a second mailing due to a non-response on the first mailing. A second survey was sent 6 weeks after the initial mailing to all non-respondents of the first mailing.

Of the 1,102 questionnaires mailed to occupational therapists with membership in the AOTA SSSIS, 514 surveys (47%) were returned and of those 506 (46%) were completed. Reasons for excluding a survey from analysis included the respondent indicated not currently working in SBP (N = 56), or survey returned either incomplete or marked “return to sender” (N = 8). The results presented are based on the 450 (41%) completed surveys returned by occupational therapists currently working in SBP.

Data Analysis

The data from the returned surveys was entered into a SPSS (version 10.0) statistical software package. The data were initially entered individually by the author and a graduate student, the team then worked together to verify the entries two times for accuracy and possible errors. Descriptive statistical methods were used to analyze the data and summarize the characteristics of the respondents. The researcher was interested in determining if there were any differences between the continuing education needs of therapists who were entry-level (less than 3 years experience in SBP) those transitioning from other practice areas (less than 1 year experience in SBP), and those with 3 or more years experience in SBP (Table 1). Data were analyzed based on the three groupings of the years of experience in SBP and on the year of graduation from an entry-level program. Relationships between variables, experience-level groups, and graduation groups were tested using chi-square statistical tests. Post-hoc tests (2 × 2 contingency tables) were completed on all chi-squares demonstrating statistically significant differences between groups. Bonferroni correction was used to adjust for the number of comparisons to maintain an error rate of .05.

Results

Profile of Respondents

Seventy-one percent of the respondents had an entry-level bachelor’s degree, and 27% a master’s entry-level (2% percent of the respondents did not identify the entry-level education). The average years reported as working in SBP were 8.7; the average years working as an occupational therapist were 13.6 years. The respondents attended 96 different colleges and universities throughout the United States. Thirty-eight percent of the respondents graduated as occupational therapists 1990–99 (n = 170), 26% during 1980–89 (n = 119), 29% graduated in 1970–79 (n = 130), 7% before 1970 (n = 28), and three therapists did not indicate year of graduation. Full-time employment was indicated by 67% of the therapists and 50% of all respondents reported being employed by (their respective) school districts. Sixty-three
percent (n = 285) of the respondents worked in states that have guidelines for SBP, 16% of those therapists (n = 45) report not having read their states’ guidelines, whereas 6% of the total respondents (n = 29) were not sure if there were state guidelines. Specialty certification (e.g., neurodevelopmental training, sensory integration and praxis tests, board certified pediatrics, etc.) was obtained by 25% of the therapists.

**Perceptions of School-Based Entry-Level Training**

**Fieldwork:** Level I fieldwork in a school-based setting was completed by 104 (23%) of the responding therapists. Participation in Level I fieldwork may have increased through the decades; 14% of the therapists that graduated in the 1970s indicated Level I fieldwork compared to 42% of those graduating in the 1990s. Level II fieldwork in SBP was completed by 104 (23%) of the therapists, increasing from 10% in the 1970s group to 41% in the 1990s group. Two hundred seventeen (48%) of the responding occupational therapists completed a Level II pediatric fieldwork, 168 (37%) of the responding therapists reported not participating in either a pediatric or SBP Level II fieldwork.

**Classroom:** Respondents reported the mean number of entry-level classroom hours devoted to pediatric content was 67.05. Fifty-eight (13%) of the respondents indicated they had completed a SBP course as a part of their entry-level education, 261 (58%) reported SBP was included in a course and reported a content range of 1–100 hours (mean of 14.28 hours) of school-based content. Therapists were asked to identify, from a list of 20, all the applicable SBP knowledge/skills areas they felt their entry-level curriculum prepared them to provide (Table 2). The list of SBP knowledge/skills was developed by the author based on the literature and 15 years’ experience in SBP. Sixty-four (14%) of the responding therapists did not indicate feeling prepared for any of the knowledge/skills areas based on entry-level education. The knowledge/skills areas therapists felt entry-level education prepared them most adequately for were observation skills (71%), adapting equipment and environments (56%), evaluation approaches appropriate for SBP (46%), and interviewing clients and caregivers (41%). Therapists felt least prepared to provide transitioning from early intervention (EI) to preschool/school to community (6%), evaluate for assistive technology (16%), provide services in inclusion and natural environments (16%), and write present levels of performance to reflect the student’s ability (17%). The data showed that with each decade therapists indicated increasing perceptions of preparedness for SBP based on their entry-level curriculum. Respondents graduating 1960–69 indicated a mean of 3.4 knowledge/skill areas (of the possible 20); graduating groups 1970–79, 1980–89, and 1990–99 indicating means of 3.5, 5.6, and 8.7 knowledge skill areas, respectively.

**Perceptions of Continuing Education Needs**

On the survey, therapists were asked to identify from a list of 20 knowledge/skills areas, those which continuing education was needed to be more effective in SBP (Table 2). Sixty-five therapists (14%) did not indicate any need for continuing education, 41 (9%) respondents indicated a need in 10 or more areas. The mean number of areas selected as needed for continuing education was 4.5. The knowledge/skills most frequently selected as needed were evaluation for assistive technology (44%), intervention techniques

<table>
<thead>
<tr>
<th>Knowledge/Skill for School-Based Practice</th>
<th>Entry-Level Prepared n</th>
<th>Continuing Education Needs n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding of federal/state regulations</td>
<td>133 (30%)</td>
<td>115 (26%)</td>
</tr>
<tr>
<td>Role of occupational therapy</td>
<td>173 (38%)</td>
<td>87 (19%)</td>
</tr>
<tr>
<td>Documentation requirements</td>
<td>83 (18%)</td>
<td>111 (25%)</td>
</tr>
<tr>
<td>Evaluation approaches</td>
<td>123 (26%)</td>
<td>123 (27%)</td>
</tr>
<tr>
<td>Service delivery models</td>
<td>145 (32%)</td>
<td>78 (19%)</td>
</tr>
<tr>
<td>Team models</td>
<td>103 (23%)</td>
<td>63 (14%)</td>
</tr>
<tr>
<td>Intervention techniques</td>
<td>148 (33%)</td>
<td>168 (37%)</td>
</tr>
<tr>
<td>Writing present levels of performance to reflect student’s ability within the curriculum</td>
<td>77 (17%)</td>
<td>104 (23%)</td>
</tr>
<tr>
<td>Writing individualized educational program goals</td>
<td>108 (24%)</td>
<td>130 (29%)</td>
</tr>
<tr>
<td>Evaluation for assistive technology</td>
<td>73 (16%)</td>
<td>198 (44%)</td>
</tr>
<tr>
<td>Parent participation in eligibility/placement</td>
<td>81 (18%)</td>
<td>59 (11%)</td>
</tr>
<tr>
<td>Provision of services in inclusion and natural environments</td>
<td>71 (16%)</td>
<td>141 (31%)</td>
</tr>
<tr>
<td>Interpreting disabilities to educators</td>
<td>108 (24%)</td>
<td>77 (17%)</td>
</tr>
<tr>
<td>Adapting equipment/environments</td>
<td>250 (56%)</td>
<td>93 (21%)</td>
</tr>
<tr>
<td>Developing home/classroom programs</td>
<td>91 (20%)</td>
<td>115 (26%)</td>
</tr>
<tr>
<td>Observation skills</td>
<td>321 (71%)</td>
<td>35 (8%)</td>
</tr>
<tr>
<td>Consultation skills</td>
<td>114 (25%)</td>
<td>111 (25%)</td>
</tr>
<tr>
<td>Interviewing clients/caregivers</td>
<td>184 (41%)</td>
<td>26 (6%)</td>
</tr>
<tr>
<td>Collaboration</td>
<td>145 (32%)</td>
<td>60 (13%)</td>
</tr>
<tr>
<td>Transitioning from early intervention to preschool/school to community</td>
<td>29 (6%)</td>
<td>112 (25%)</td>
</tr>
</tbody>
</table>
were different. The three experience groups, the perceived needs of each group included individual education program (IEP) goals (29%). However, when the continuing education needs of the respondents were analyzed using the three experience groups, the perceived needs of each group were different. The *entry-level* group (*n* = 141) selected a mean of 5.06 continuing education needs, respondents in the *experienced* group (*n* = 292) selected a mean of 3.06 and the *transitioning* therapists (*n* = 17) indicated a mean of 6.64 areas of need.

One area that respondents tended to include in the top three continuing education needs, despite the level of experience, was evaluation for assistive technology (Table 3). This is an area of practice that is interdisciplinary and involves constantly changing technological applications requiring ongoing education in order for therapists to make cost-effective and client-specific choices. Additionally, each of the experience groups selected in the top six continuing education needs components of practice which have changed through the years with each amendment to Education for All Handicapped Children Act of 1975. These components include understanding of federal and state regulations related to the provision of occupational therapy services, intervention techniques appropriate to SBP, participate in writing appropriate IEP goals, and provision of services in inclusion/natural environments.

After correcting for effect size, statistically significant differences were found between the perceived needs for continuing education and the level of experience groups (Table 4). When compared to *entry* and *experienced* therapists, *transitioning* therapists indicated a need for more continuing education concerning federal/state regulations, and evaluation for assistive technology. When compared to *experienced* SBP respondents, *entry-level* therapists indicated needs for continuing education that were statistically significant for knowledge/skills areas of writing IEP goals, developing home/school programs, intervention techniques appropriate to SBP, consultation skills, and transitioning from early intervention to preschool/school/community.

In summary, 5 of the 10 identified differences (Table 4) in the perceived need for continuing education were between the entry group and the experienced group, two between the transitioning and experienced groups, and three between the entry-level and the transitioning group. Although the expressed level of need for additional knowledge/skills differed among the experience groups (Table 4), all groups identified three common areas for continuing education needs, intervention techniques, evaluation for assistive technology (AT), and writing IEP goals.

**Experiences Perceived as Preparing for SBP**

From a list of six categories, respondents were asked to indicate all that applied in preparing them to work in SBP. The categories and the percentage of respondents indicating its use as preparation to work in SBP were entry-level curriculum (30%), Level I fieldwork (16%), Level II fieldwork (35%), mentoring (60%), continuing education (75%), and other (50%). “Other” was open-ended allowing respondents to list additional tools/experiences. The responses to “other” were: AOTA self-study courses (42%), AOTA SSSIS (23%), *OT Week/Practice* (21%), AOTA Listserv (10%), *OT Advance* (9%), AOTA Conferences (3%), and AOTA School System Guide (2%).

**Perceptions of Preparation for SBP**

Eighty percent of the occupational therapists answered no when asked if they felt prepared for SBP based on entry-level education alone. Perception of being prepared increased through the decades as evident with 31.9% of the 1990–99 graduation group feeling prepared for SBP compared to 16% in 1980–89, and 10% of those graduating 1970–79.

**Discussion**

The data from the survey provided a profile of occupational therapists working in SBP in 2000 including their entry-level experience, was evaluation for assistive technology (Table 3). This is an area of practice that is interdisciplinary and involves constantly changing technological applications requiring ongoing education in order for therapists to make cost-effective and client-specific choices. Additionally, each of the experience groups selected in the top six continuing education needs components of practice which have changed through the years with each amendment to Education for All Handicapped Children Act of 1975. These components include understanding of federal and state regulations related to the provision of occupational therapy services, intervention techniques appropriate to SBP, participate in writing appropriate IEP goals, and provision of services in inclusion/natural environments.

After correcting for effect size, statistically significant differences were found between the perceived needs for continuing education and the level of experience groups (Table 4). When compared to *entry* and *experienced* therapists, *transitioning* therapists indicated a need for more continuing education concerning federal/state regulations, and evaluation for assistive technology. When compared to *experienced* SBP respondents, *entry-level* therapists indicated needs for continuing education that were statistically significant for knowledge/skills areas of writing IEP goals, developing home/school programs, intervention techniques appropriate to SBP, consultation skills, and transitioning from early intervention to preschool/school/community.

In summary, 5 of the 10 identified differences (Table 4) in the perceived need for continuing education were between the entry group and the experienced group, two between the transitioning and experienced groups, and three between the entry-level and the transitioning group. Although the expressed level of need for additional knowledge/skills differed among the experience groups (Table 4), all groups identified three common areas for continuing education needs, intervention techniques, evaluation for assistive technology (AT), and writing IEP goals.

**Experiences Perceived as Preparing for SBP**

From a list of six categories, respondents were asked to indicate all that applied in preparing them to work in SBP. The categories and the percentage of respondents indicating its use as preparation to work in SBP were entry-level curriculum (30%), Level I fieldwork (16%), Level II fieldwork (35%), mentoring (60%), continuing education (75%), and other (50%). “Other” was open-ended allowing respondents to list additional tools/experiences. The responses to “other” were: AOTA self-study courses (42%), AOTA SSSIS (23%), *OT Week/Practice* (21%), AOTA Listserv (10%), *OT Advance* (9%), AOTA Conferences (3%), and AOTA School System Guide (2%).

**Perceptions of Preparation for SBP**

Eighty percent of the occupational therapists answered no when asked if they felt prepared for SBP based on entry-level education alone. Perception of being prepared increased through the decades as evident with 31.9% of the 1990–99 graduation group feeling prepared for SBP compared to 16% in 1980–89, and 10% of those graduating 1970–79.

**Discussion**

The data from the survey provided a profile of occupational therapists working in SBP in 2000 including their entry-level experience, was evaluation for assistive technology (Table 3). This is an area of practice that is interdisciplinary and involves constantly changing technological applications requiring ongoing education in order for therapists to make cost-effective and client-specific choices. Additionally, each of the experience groups selected in the top six continuing education needs components of practice which have changed through the years with each amendment to Education for All Handicapped Children Act of 1975. These components include understanding of federal and state regulations related to the provision of occupational therapy services, intervention techniques appropriate to SBP, participate in writing appropriate IEP goals, and provision of services in inclusion/natural environments.

After correcting for effect size, statistically significant differences were found between the perceived needs for continuing education and the level of experience groups (Table 4). When compared to *entry* and *experienced* therapists, *transitioning* therapists indicated a need for more continuing education concerning federal/state regulations, and evaluation for assistive technology. When compared to *experienced* SBP respondents, *entry-level* therapists indicated needs for continuing education that were statistically significant for knowledge/skills areas of writing IEP goals, developing home/school programs, intervention techniques appropriate to SBP, consultation skills, and transitioning from early intervention to preschool/school/community.

In summary, 5 of the 10 identified differences (Table 4) in the perceived need for continuing education were between the entry group and the experienced group, two between the transitioning and experienced groups, and three between the entry-level and the transitioning group. Although the expressed level of need for additional knowledge/skills differed among the experience groups (Table 4), all groups identified three common areas for continuing education needs, intervention techniques, evaluation for assistive technology (AT), and writing IEP goals.

**Experiences Perceived as Preparing for SBP**

From a list of six categories, respondents were asked to indicate all that applied in preparing them to work in SBP. The categories and the percentage of respondents indicating its use as preparation to work in SBP were entry-level curriculum (30%), Level I fieldwork (16%), Level II fieldwork (35%), mentoring (60%), continuing education (75%), and other (50%). “Other” was open-ended allowing respondents to list additional tools/experiences. The responses to “other” were: AOTA self-study courses (42%), AOTA SSSIS (23%), *OT Week/Practice* (21%), AOTA Listserv (10%), *OT Advance* (9%), AOTA Conferences (3%), and AOTA School System Guide (2%).

**Perceptions of Preparation for SBP**

Eighty percent of the occupational therapists answered no when asked if they felt prepared for SBP based on entry-level education alone. Perception of being prepared increased through the decades as evident with 31.9% of the 1990–99 graduation group feeling prepared for SBP compared to 16% in 1980–89, and 10% of those graduating 1970–79.
The overall results of this study support the findings of the 1993 School-Based Practice Survey (AOTA) and the concerns of other practitioners (Amundson, 1995; Bundy, 1997; Chandler, 1995, 1998; Griswold & Strassler, 1995; Kaplan & Porway, 1988; Powell, 1994). Occupational therapists are working in an educational model without the entry-level knowledge/skills suggested for best practice. Based on the responses to the 2000 Survey of School-Based Practice, little has changed through the years and occupational therapists currently working in SBP today, perceive they were not prepared for this setting based on entry-level education. Areas identified in the literature and indicated by respondents as important in the preparation for entry-level in SBP will now be further discussed.

**Guidelines**

Although practitioners have been encouraged to develop guidelines for practice in school-based settings (Sarracino & Hanft, 1996), this research indicated that 26% of the respondents reported not having state guidelines for practice. An additional 6% reported they may have state guidelines but are not sure. These findings suggest that one third (32%) of the occupational therapists working in SBP are not using a specific state document to establish standards and guide practice. Unless occupational therapists have been mentored into SBP through either entry-level curriculum, Level I or Level II fieldwork or a supervisory relationship, they seem unaware of the existence and value of state guidelines for defining practice.

**Fieldwork**

The goal of Level II fieldwork is to develop competent, entry-level generalist occupational therapists (AOTA, 1998). Numerous researchers (Amundson, 1995; Bundy, 1997; Griswold & Strassler, 1995; Kaplan & Porway, 1988) have identified the impact of Level II fieldwork on the preparedness of SBP. This research shows only one third of therapists working in SBP prepared for this setting by completing Level II fieldwork as a part of the entry-level curriculum.

Level I fieldwork is designed to give students opportunities to participate in selected aspects of the occupational therapy process (AOTA, 1998). Level I fieldwork provides

---

**Table 4. Chi-Square and Post-Hoc Tests on Continuing Education Needs Demonstrating Statistically Significant Differences by Experience Group**

<table>
<thead>
<tr>
<th>Chi-Square Analysis</th>
<th>Group</th>
<th>( \chi^2 )</th>
<th>( p )</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>■ Federal/state regulations</td>
<td>1:2</td>
<td>1.31</td>
<td>.717</td>
<td>.017</td>
</tr>
<tr>
<td>( \textit{Note.} \ \chi^2 = 7.09, df = 2, p &lt; .029 )</td>
<td>1:3</td>
<td>6.782</td>
<td>.009</td>
<td>.203</td>
</tr>
<tr>
<td>2:3</td>
<td>6.433</td>
<td>.001</td>
<td>.143</td>
<td></td>
</tr>
<tr>
<td>■ Role of occupational therapy</td>
<td>1:2</td>
<td>1.586</td>
<td>.208</td>
<td>.060</td>
</tr>
<tr>
<td>( \textit{Note.} \ \chi^2 = 7.725, df = 2, p &lt; .021 )</td>
<td>1:3</td>
<td>8.002</td>
<td>.005</td>
<td>.220</td>
</tr>
<tr>
<td>2:3</td>
<td>4.845</td>
<td>.028</td>
<td>.124</td>
<td></td>
</tr>
<tr>
<td>■ Intervention techniques</td>
<td>1:2</td>
<td>16.726</td>
<td>.0001</td>
<td>.193</td>
</tr>
<tr>
<td>( \textit{Note.} \ \chi^2 = 18.45, df = 2, p &lt; .0001 )</td>
<td>1:3</td>
<td>3.870</td>
<td>.049</td>
<td>.111</td>
</tr>
<tr>
<td>2:3</td>
<td>.041</td>
<td>.840</td>
<td>.016</td>
<td></td>
</tr>
<tr>
<td>■ Writing IEP goals</td>
<td>1:2</td>
<td>6.197</td>
<td>.013</td>
<td>.119</td>
</tr>
<tr>
<td>( \textit{Note.} \ \chi^2 = 7.43, df = 2, p &lt; .024 )</td>
<td>1:3</td>
<td>2.304</td>
<td>.129</td>
<td>.086</td>
</tr>
<tr>
<td>2:3</td>
<td>.804</td>
<td>.393</td>
<td>.037</td>
<td></td>
</tr>
<tr>
<td>■ Evaluation for AT</td>
<td>1:2</td>
<td>2.607</td>
<td>.436</td>
<td>.037</td>
</tr>
<tr>
<td>( \textit{Note.} \ \chi^2 = 8.162, df = 2, p &lt; .017 )</td>
<td>1:3</td>
<td>5.866</td>
<td>.015</td>
<td>.189</td>
</tr>
<tr>
<td>2:3</td>
<td>8.028</td>
<td>.005</td>
<td>.159</td>
<td></td>
</tr>
<tr>
<td>■ Developing home/school programs</td>
<td>1:2</td>
<td>19.020</td>
<td>.0001</td>
<td>.210</td>
</tr>
<tr>
<td>( \textit{Note.} \ \chi^2 = 21.87, df = 2, p &lt; .0001 )</td>
<td>1:3</td>
<td>.053</td>
<td>.818</td>
<td>.018</td>
</tr>
<tr>
<td>2:3</td>
<td>5.210</td>
<td>.022</td>
<td>.129</td>
<td></td>
</tr>
<tr>
<td>■ Consultation skills</td>
<td>1:2</td>
<td>10.916</td>
<td>.001</td>
<td>.157</td>
</tr>
<tr>
<td>( \textit{Note.} \ \chi^2 = 11.865, df = 2, p &lt; .003 )</td>
<td>1:3</td>
<td>.001</td>
<td>.918</td>
<td>.008</td>
</tr>
<tr>
<td>2:3</td>
<td>2.460</td>
<td>.117</td>
<td>.117</td>
<td></td>
</tr>
<tr>
<td>■ Transitioning from EI to preschool/school/community</td>
<td>1:2</td>
<td>13.636</td>
<td>.000</td>
<td>.175</td>
</tr>
<tr>
<td>( \textit{Note.} \ \chi^2 = 14.40, df = 2, p &lt; .001 )</td>
<td>1:3</td>
<td>.000</td>
<td>.989</td>
<td>.001</td>
</tr>
<tr>
<td>2:3</td>
<td>2.601</td>
<td>.107</td>
<td>.091</td>
<td></td>
</tr>
</tbody>
</table>

Note. 1 = entry-level, 2 = experienced, 3 = transitioning. IEP = individualized educational program; AT = assistive technology; EI = early intervention.

*Bonferroni adjustment \( p < .017 \)

Bold indicates comparisons demonstrating significance at \( p < .05 \)
opportunities for students to develop an understanding of occupational therapy practice and make choices for future fieldwork and career options. Despite these important experiential opportunities, only a small percentage of SBP therapists (26%) reported completing Level I fieldwork in SBP.

The Standards (AOTA, 1998) provided a recommendation that fieldwork include a variety of individuals across the life span and in a variety of settings. However, this research suggests that students may not be completing the recommended “across the life span” Level II experiences as evidenced by the finding that 37% of the respondents did not complete either a pediatric or SBP Level II fieldwork. This results in therapists working in SBP that have not had supervised opportunities with experienced SBP practitioners learning the service delivery models of an educational system. Respondents indicated feeling that Level I or Level II fieldwork experiences, or both, would have prepared them as entry-level therapists in SBP. Perhaps fieldwork educators could identify those students interested in SBP and make certain they are placed in SBP fieldwork.

Preservice Curricula

The Guidelines encouraged entry-level curricula to include the knowledge/skills necessary for best practice in pediatric occupational therapy. According to the results of this survey; however, it appears many SBP therapists are not feeling prepared by entry-level curricula. After analyzing the data from the 1993 AOTA School-Based Practice Survey, Chandler (1995) expressed the concern that the profession of occupational therapy needs to recognize the imperative need to include SBP in professional education. Admundson (1995) has also expressed the importance of adding the knowledge/skills needed for SBP into the entry-level curricula. However, this research indicated 202 (49%) therapists received “zero” school-based classroom hours and only 13% were provided with a separate school-based course. Again, therapists are working in settings for which they have not been prepared by entry-level curricula.

When looking at the entry-level preparedness, of particular interest is analysis of the knowledge/skill areas in which therapists felt adequately prepared. Therapists felt most prepared for areas that are taught in entry-level education for a variety of practice settings (e.g., hospitals, home health, nursing facility) and not school-based specific areas. In fact, several of the areas specific to SBP as shown in Table 2, were those in which therapists felt least prepared. These results should cause concern when considered with the research findings that occupational therapists in school settings reported receiving the least supervision, and were not likely to report receiving any supervision at all (Greenberg, Muenzen, & Smith, 1997). Therefore, therapists working in SBP perceive themselves as not being prepared by entry-level education and additionally have not received on-the-job supervision. Possible solutions to these concerns include specialty certification for occupational therapists working in SBP, encouraging SBP therapists to join the SSSIS, and utilization of the listserv as a mentoring resource.

Continuing Education Needs

The findings of this study indicated that there are differences between the areas of perceived continuing education needs of therapists depending on their experience-level continuum in SBP. As the school-based therapist gained experience, the need to receive continuing education in SBP decreased. Again, these knowledge/skill areas are SBP-specific and with on-the-job training (i.e., experience) should reduce the need for continuing education in these areas. However, the profession of occupational therapy should be concerned about the effectiveness and appropriateness of intervention during these “learning years.” Several therapists shared “just doing the best they can” as they became familiar with the setting. This image of occupational therapists working in settings where they are unfamiliar with the terminology of the educational model, the rules and regulations, or both, that provide for related services, is not one the profession wants to portray.

Perceptions of Preparation

School-based therapists indicated that mentoring and continuing education were important in preparing them for practice. Mentoring was selected by 60% of the respondents; this finding is in agreement with others (Admundson, 1995; Muhlenhaupt, Miller, Sanders, & Swinth, 1998; Sarracino & Hanft, 1996) that have identified mentoring as significant to developing expertise in SBP. Therapists working in SBP must take responsibility to advise special education directors of the role a mentor plays as well as assisting with the development of mentoring materials to be provided to all occupational therapists new to SBP. Some examples of information a mentoring packet could include are: regional SBP experts, resources available through the state and national occupational therapy associations, SBP workshops available, state guidelines, etc.

Continuing education was selected most often (75%) by occupational therapists as playing a role in their preparation for SBP. It is interesting that the workshops therapists listed most often, focused on treatment techniques such as sensory integration, handwriting, and neurodevelopmental training with only 10% of the respondents selecting workshops focusing on educational relevance and special education laws. In order to provide educationally relevant intervention in the least restrictive environment,
therapists must have knowledge and skills that include both an understanding of the federal and state regulations that define occupational therapy services in SBP as well as treatment techniques appropriate for SBP. The responses to “other” (56%) demonstrated that AOTA has responded to the needs of occupational therapists working in SBP with the provision of numerous school-based publications, workshops, and Web-based technology offerings. Entry-level SBP therapists should be encouraged to utilize continuing education resources provided by state and national associations.

Occupational therapists responding to this research indicated preparation for SBP includes entry-level curriculum in SBP, fieldwork experiences, mentoring, continuing education, and a variety of other professional and personal self-study experiences. Therapists entering SBP should be prepared to attend a variety of continuing education venues that address specific areas of intervention, update therapists on legislative changes, and provide opportunities for personal and professional growth. The profession of occupational therapy together with occupational therapists working in SBP must collaborate to clearly identify the knowledge, skills, and abilities needed for educational settings and agree at what point occupational therapists should be prepared for SBP. One question that should be addressed is whether entry-level education alone should create therapists that perceive being prepared for this practice area or should SBP be dependent upon continuing education to adequately prepare therapists? The responses to the Survey of School-Based Practice (Brandenburger-Shasby, 2000) have identified the deficits and needs of occupational therapists currently working in SBP, now we as a profession must create a plan to ensure best practice in the educational setting.

Acknowledgments

I want to thank the occupational therapists who invested the time to complete the Survey of School-Based Practice. I also want to thank Colleen Schneck, ScD, OTR/L, FAOTA; Jean Kalscheur, MS, OTR/L, FAOTA; Doris Pierce, PhD, OTR/L, FAOTA; Becki Trickey, PhD, OTR/L; and Barbara Chandler, MOT, OTR, for their encouragement and editorial recommendations. This study was conducted in partial fulfillment of the requirements for the degree of Doctor of Education in Curriculum and Instruction at the University of South Carolina. An earlier version of this paper was presented at the Great Southern Occupational Therapy Conference, September 2000, Charleston, WV.

References


Kellergrew, D., & Allen, D. (1996). Occupational therapy in...


---

**Early Intervention and School-Based Occupational Therapy Best Practice 2005**

This 2-day workshop assists occupational therapy professionals to align their practice with the IDEA and AOTA official documents. It deals with broad topics including service delivery in natural and least restrictive environments and transitions from early intervention to school, as well as specific practice issues. It also presents strategies for facilitating interventions that are occupation based in all settings served under IDEA and Section 504 of the Rehabilitation Act.

Earn 1.3 AOTA CEUs (13 contact hours).

**AOTA Members: $325, Nonmembers: $460**

Save with Early Registration!

Details at [www.aota.org](http://www.aota.org) (Click on Continuing Ed) or Call 800-SAY-AOTA ext. 2837.