The Level I Fieldwork Process

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Key Words: education, occupational therapy • fieldwork, occupational therapy, Level I

This paper reports the results of a nationwide study in which the factors that relate to the overall Level I fieldwork implementation were compared across a variety of occupational therapy fieldwork settings. Two questionnaires were used to collect data: One was completed by 395 Level I fieldwork site supervisors, and the other by faculty representatives from 40 professional-level academic occupational therapy programs. The data showed that there were more similarities than differences among the fieldwork sites, thus suggesting that a common process is used in most fieldwork placements. The primary factors that differentiated among the various fieldwork settings were variables that tended to describe the settings demographically (e.g., type of employment setting, funding sources). Interesting differences were found among the various fieldwork settings between the amount of supervision given to Level I students and the amount of independent, treatment-oriented performance by the students.

Consistent with this flexible structure, several uniquely designed Level I experiences have been reported. Gill, Clark, Hendrickson, and Mason (1974) described an experience in which students were involved in a summer camp for diabetic children. Platt, Martell, and Clements (1977) reported on a Level I assignment in a federal correctional institution. Cromwell and Kielhofner (1976) and Cole (1985) described programs in which students were placed in community-based and psychiatric settings, respectively, in which previous occupational therapy services were minimal or nonexistent. Similarly, Germain, Miller, and Pang (1986) described a service-learning approach in which Level I experiences were structured to meet not only students’ learning needs but also existing community program needs. Crist (1986) observed that future trends for fieldwork education should include alternate models for fieldwork provision to maximize the efforts of fieldwork supervisors. Nystrom (1986), however, cautioned that students should first be placed in “settings where occupational therapy practice exists, not where it is to be developed, unless development of new programs is the content that is taught” (p. 94).

Leonardelli and Caruso (1986) noted a strong concern among clinicians relative to the “cost effectiveness of implementing Level I fieldwork” (p. 258). They also noted that “it is at this level of clinical education, where the facility never recoups the lost revenue-producing time spent in student instruction and supervision, that occupational therapy depart-

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ment heads must consider cutbacks in student programs" (p. 260).

Level I fieldwork has been viewed as vulnerable in light of prospective payment systems because it is "often valued less by fieldwork educators than Level II fieldwork primarily because of its short duration and limited return to the facility" (Kautzmann, 1986, p. 472). The assumption has been made that a cost is generated in the conduction of a Level I affiliation (Bell, 1986; Crist, 1986; Neistadt & O'Reilly, 1988).

The research to date, although limited, has not supported this cost assumption. A major problem in the determination of the financial implications of Level I fieldwork has been the lack of requirements that ensure a consistent process of implementation of this level of clinical education (AOTA, Commission on Education, 1986; Leonardelli & Caruso, 1986). In their study of the productivity effects of occupational therapy, physical therapy, and radiology technology students, Leiken, Stern, and Baines (1983) found that Level II students had a positive effect on treatment unit output, whereas Level I students had no effect on clinical output. Similar relationships have been found in related fields between beginning and more advanced levels of clinical education. Porter and Kincard (1977) demonstrated differences in the degree of benefit between junior- and senior-level physical therapy students, with the seniors generating greater benefits. Pawlson, Warkins, and Donaldson (1980) found a greater loss in productivity associated with the more advanced medical students than with the first-year students. It appears from the Pawlson et al. study that loss in productivity was minimal when the student's role was purely one of observation.

**Study Purpose**

The purpose of this study was to determine the factors (i.e., the variables) that have an important effect on the training process and, consequently, the financial implications in various Level I fieldwork clinical sites throughout the United States. To achieve this purpose, I (a) developed questionnaires to explore the incidence and pattern of variables affecting the process in Level I fieldwork sites, (b) collected data from randomly selected Level I fieldwork sites throughout the United States using the questionnaires, (c) analyzed the data using descriptive and inferential statistics, and (d) used an inferential statistical analysis to determine the factors that may have an important effect on the Level I fieldwork process.

**Methodology**

**Development of Questionnaires**

The questionnaires were constructed to collect data from the fieldwork sites and the academic educational programs. Academic and clinical supervisors were consulted in the development of these items to ensure the inclusion of important descriptors of Level I fieldwork assignments.

The fieldwork site questionnaire focused on the following information:

1. A general description of the institution, including the client census, the type of setting, and the institution’s funding source and mission.
2. The structure and number of Level I experiences.
3. The students’ scheduling and fieldwork activities.
4. The assignment of responsibility for developing goals, objectives, and student assignments for the Level I experiences.
5. The amount and type of supervision and evaluation provided.
6. The perceived productivity effects.

The academic questionnaire addressed the following:

1. The overall structure of the Level I experience.
2. The criteria for fieldwork site selection.
3. The supervisory and evaluation requirements.
4. The demographics of the academic educational program.

**Recruitment and Data Collection**

The research participants were recruited through the cooperation and endorsement of the baccalaureate-level faculty of the occupational therapy academic programs. All baccalaureate programs were contacted (AOTA, 1987). The academic fieldwork coordinators from 40 programs completed the questionnaire and provided the names and addresses of Level I fieldwork sites and supervisory personnel. A total of 2,562 clinical sites were included, on the basis of the information provided. Sequential sampling yielded a final list of 957 clinical sites. These 957 sites were sent a fieldwork site questionnaire and were invited to participate in the study. Only those who had supervised Level I students within the preceding year were asked to complete the questionnaire.

**Results**

Approximately 11% of the randomly selected fieldwork sites (110 of 957) did not have Level I students during the previous year. Of the remaining 847 sites, 395 (47%) completed the questionnaire: 170 returns (43%) from physical dysfunction sites, 80 (20%) from psychosocial sites, 75 (19%) from pediatric sites, and
70 (10%) from sites categorized as other, which included geriatric, nursing home, and developmental disability settings.

The respondents reported a range of 0 to 60 registered therapists employed at a given site, with an overall mean of five therapists per site. The average number of occupational therapists per site was three therapists for pediatric sites, seven therapists for physical dysfunction sites, four therapists for psychosocial sites, and four therapists for other sites.

**Descriptive Data Analysis**

The clinical site survey. The results of the descriptive analysis of the data received from the 395 fieldwork site questionnaires were compared relative to four disability areas: psychosocial, physical dysfunction, pediatrics, and other. Whereas the pediatric and psychosocial sites usually had fewer than 50 clients per site, the physical dysfunction and other sites often had more than 200 clients per site (see Figure 1). The physical dysfunction sites were most frequently classified as private, nonprofit institutions (65%), whereas the remaining settings were more evenly distributed among private, nonprofit and public status. Less than 20% of any type of setting was classified as private, for-profit. Over 55% of the pediatric settings were categorized as schools, whereas a similar percentage of physical dysfunction settings were hospital-based. Nearly 75% of the respondents from the psychosocial settings categorized their facilities as hospitals, whereas facilities in the other settings were most frequently categorized as residential.

The primary funding source across all settings was governmental (either state or federal). The pediatric and physical dysfunction settings received funding from trusts and charities (philanthropic sources) more often than did the psychosocial or other settings.

In examining the breadth of clinical education programs offered by sites for professions other than occupational therapy, I found that the pediatric and other settings accepted clinical education students from up to three different professional fields. Conversely, the physical dysfunction settings often had broader clinical education programs that accepted students from seven or more professional fields.

In approximately 70% of the sites responding, the pediatric and other sites accepted students from only one occupational therapy academic program, whereas the physical dysfunction and psychosocial settings more often accepted Level I students from two or more occupational therapy academic programs. The pediatric sites seldom accepted more than two Level I students at a time, whereas facilities in the other category frequently accepted groups of three or more students at one time (see Figure 2).

The data indicated that across all disability areas, each therapist generally supervised only one student at a time. Over 30% of the pediatric settings, however, reported a supervision ratio of two or more students per therapist; the physical dysfunction settings re-
ported this supervision ratio least often (approximately 15% of the settings). The students were engaged primarily in passive observation, with a greater percentage of time in the pediatric settings devoted to observation than in the remaining settings (see Figure 3).

Level I students reported to a single supervisor in 67% of the sites. This relationship held across all types of disability settings, with slight variance noted in the other category, in which approximately 46% indicated that Level I students were assigned to more than one supervisor. Interesting differences existed across disability areas regarding the amount of one-on-one supervision that the students received. Over 70% of the pediatric sites reported that Level I students received one-on-one supervision for 76% or more of the time that they were present in the clinical setting, whereas only 35% of the psychosocial settings reported providing this level of one-on-one supervision. Moreover, only 10% of the pediatric settings reported offering one-on-one supervision less than 50% of the time, with 36% of the psychosocial settings having reported this level of supervision (see Figure 4).

Many questionnaire items revealed interesting commonalities. Nearly all of the settings listed patient treatment, not education or research, as their primary mission. Similarly, 95% of all respondents reported that an occupational therapist was the direct fieldwork site supervisor. The responsibility for setting goals and objectives for the Level I experience was most often that of the academic institution, either independently or shared with the fieldwork site. Further, 60% or more of the sites reported that the finding of special cases, that is, the locating of special types of patients or the structuring of special experiences beyond the normal clinic routine, was not required of the Level I site supervisors. Most of the sites required homework assignments and used formal evaluation procedures during the Level I experience, with little variation noted across the various settings. It was also reported that personnel at 87% of the sites graded or reviewed the homework assignments.

Forty-seven percent of the respondents indicated that they perceived no reduction in clinic productivity as a result of the presence of Level I students, whereas 37% felt that productivity was decreased. Interestingly, 11% believed that the presence of Level I students increased productivity, while the remainder expressed no opinion.

The academic program survey. Results from the academic program questionnaire were consistent with those of the Level I fieldwork clinical site questionnaire. Eighty-five percent of the academic educational programs required a registered occupational therapist as the fieldwork supervisor, and 95% provided a written manual or handout to explain the objectives and requirements of the Level I experience. Academic programs required Level I fieldwork placements in the following areas: psychosocial (88%), physical dysfunction (85%), pediatrics (65%), gerontology (28%), and other miscellaneous areas (14%). Most of the responding programs (80%) indicated that three to four Level I experiences were re-
required, whereas 15% required fewer (2) or more (5 to 6) experiences. Further, most programs (80%) assigned students to Level I experiences during each academic semester or quarter of the professional program. Various responses were obtained regarding the scheduling of the Level I assignments. Thirteen programs (33%) indicated that assignments were made both on the basis of one or two times per week throughout the semester and in solid block assignments of a week or more. Ten schools (25%) sent students only once or twice a week, whereas 9 (23%) made block assignments by the day or week. Twelve schools indicated that the assignment pattern varied according to the clinical site, and 10 indicated that variation was related to the course design associated with the Level I experience.

Seventy percent of the educators reported that fieldwork sites received remuneration for training Level I students, with 25% of these indicating that this reimbursement took the form of free tuition to the supervisor. Twelve schools (30%) indicated that additional charges for the Level I placement were passed on to the students.

Inferential Data Analysis

The inferential analysis consisted of a discriminant analysis and a one-way analysis of variance (ANOVA). The results of the discriminant analysis are shown in Table 1, which lists those variables that met the significance level ($p < .15$) set by default in the SAS program for discriminant analysis (SAS Institute, 1985).

The results of the discriminant analysis indicate that the primary discriminators across the groups are those variables that tend to describe the fieldwork placements demographically. For example, the school, resident, and hospital variables all relate to the single questionnaire item concerning the type of employment setting in which the respondents worked. Further, the significant variables public funding and funding—trusts and foundations relate to another single questionnaire item designed to determine a site's primary funding source. Only three of the significant variables—one-on-one supervision less than 50%, clinic takes students from only one educational program, and three or more Level I students in facility—discriminated between the Level I placements on factors that relate directly to the implementation of the fieldwork experience.

The one-way ANOVA shows significant differences across the groups on specific variables. A Tukey procedure (SAS Institute, 1985) was used to determine the direction of these differences (see Table 2).

The results of the ANOVA demonstrate the existence of occasional differences among the types of fieldwork experiences, but few differences crossed all categories of fieldwork experiences. Further, these results confirm differences that were noted among the types of clinical settings within the descriptive analysis presented above. As in the discriminant analysis, the statistically strongest differences are found in the demographic variables.

The Level I Fieldwork Process

A review of the descriptive and inferential results of the study suggests that a common Level I fieldwork process exists that describes the factors that are involved in the placement of students in clinical sites (see Figure 5). In accordance with the Essentials and Guidelines of an Accredited Educational Program for the Occupational Therapist (AOTA, 1989), Level I experiences are an integral part of the academic course designs and are coordinated by academic personnel, usually in conjunction with specific didactic course work within the curriculum. The academic

![Table 1](attachment:Table1.png)

Table 1

| Discriminant Analysis of Types of Clinical Sites Relative to Level I Fieldwork |
|---------------------------------|-----------------|-----------------|-----------------|
| Variable Entered                | Number Entered | Partial $R^2$    | $F$              | Probability $> F$ |
| School                          | 1               | .4104            | 90.720           | .001**           |
| Resident                        | 2               | .1051            | 15.252           | .001**           |
| Public funding                  | 3               | .0489            | 6.670            | .003**           |
| Census > 200                    | 4               | .0495            | 6.740            | .002**           |
| Hospital                        | 5               | .0475            | 6.429            | .004**           |
| One-on-one supervision < 50%    | 6               | .0493            | 6.675            | .0005**          |
| Funding—Trusts & foundations    | 7               | .0367            | 4.895            | .025**           |
| Three or more Level I students in facility | 8               | .0285            | 3.748            | .013**           |
| Clinic takes students from only one educational program | 9               | .0255            | 3.345            | .0191**          |
| Private, nonprofit              | 10              | .0222            | 2.889            | .0549**          |
| Assist treatment                | 11              | .0157            | 2.021            | .1088*           |
| Passive observation             | 12              | .0155            | 1.997            | .112*            |
| Supervise one student at a time | 13              | .0155            | 1.986            | .1139*           |
| One supervisor per student      | 14              | .0145            | 1.852            | .1355*           |
| Formal evaluations              | 15              | .0143            | 1.829            | .1390*           |

*p < .15. **p < .05.*
Table 2
Analysis of Variance Results of Selected Variables Between Types of Sites in Level I Fieldwork

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>F</th>
<th>Probability &gt; F*</th>
<th>Group Comparisons*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Census &gt; 200</td>
<td>4.54</td>
<td>.0038</td>
<td>Other &gt; Peds</td>
</tr>
<tr>
<td>Private, nonprofit facility</td>
<td>8.48</td>
<td>.0001</td>
<td>Phys Dys &gt; all groups</td>
</tr>
<tr>
<td>Publicly owned</td>
<td>9.03</td>
<td>.0001</td>
<td>Phys Dys &lt; all groups</td>
</tr>
<tr>
<td>Hospital</td>
<td>32.22</td>
<td>.0001</td>
<td>Phys Dys and Psych &gt; Peds and Other</td>
</tr>
<tr>
<td>Rehabilitation center</td>
<td>5.98</td>
<td>.0005</td>
<td>Phys Dys &gt; all groups</td>
</tr>
<tr>
<td>Residential facility</td>
<td>6.71</td>
<td>.0002</td>
<td>Other &gt; all groups</td>
</tr>
<tr>
<td>School</td>
<td>90.72</td>
<td>.0001</td>
<td>Peds &gt; all groups</td>
</tr>
<tr>
<td>Other funding—Trusts &amp; foundations</td>
<td>5.30</td>
<td>.0014</td>
<td>Peds and Phys Dys &gt; Psych</td>
</tr>
<tr>
<td>One to three professional schools use site</td>
<td>3.38</td>
<td>.183</td>
<td>Peds &gt; Phys Dys</td>
</tr>
<tr>
<td>Four to six professional schools use site</td>
<td>2.96</td>
<td>.0323</td>
<td>Psych &gt; Other</td>
</tr>
<tr>
<td>Number of OTRs</td>
<td>4.94</td>
<td>.0022</td>
<td>Phys Dys &gt; Other, Peds</td>
</tr>
<tr>
<td>Three or more Level I students in one facility</td>
<td>3.69</td>
<td>.121</td>
<td>Other &gt; Phys Dys, Psych</td>
</tr>
<tr>
<td>Two or more students supervised by one supervisor</td>
<td>3.61</td>
<td>.135</td>
<td>Peds &gt; Phys Dys</td>
</tr>
<tr>
<td>One OT program sends Level I students</td>
<td>10.89</td>
<td>.0001</td>
<td>Peds, Other &gt; Phys Dys, Psych</td>
</tr>
<tr>
<td>Two OT programs send Level I students</td>
<td>4.98</td>
<td>.021</td>
<td>Phys Dys &gt; Other</td>
</tr>
<tr>
<td>Three OT programs send Level I students</td>
<td>3.35</td>
<td>.191</td>
<td>Psych &gt; Peds</td>
</tr>
<tr>
<td>One-on-one supervision &lt; 50%</td>
<td>7.35</td>
<td>.0001</td>
<td>Psych, Other &gt; Phys Dys, Psych</td>
</tr>
<tr>
<td>One-on-one supervision ≥ 76%</td>
<td>8.27</td>
<td>.0001</td>
<td>Peds &gt; Psych, Other, Phys Dys &gt; Psych</td>
</tr>
</tbody>
</table>

Note. Peds = pediatric site. Phys Dys = physical dysfunction site. Psych = psychosocial site. Other = miscellaneous sites. OTRs = occupational therapists. OT = occupational therapy. * p < .05.

Program personnel select sites on the basis of their willingness to accept Level I students as well as the quality of the experience and the relationship of the experience to the didactic course work being presented. Most of the placements (82%) are in the traditional categories of physical dysfunction, psychosocial dysfunction, and pediatrics. The students are supervised usually by a single supervisor (66%). Sixty percent of the academic respondents revealed that faculty were directly involved in the supervision of Level I students, but the nature or extent of this supervisory involvement needs further study. Although 15% of the academic program respondents permitted nonregistered occupational therapists to supervise the Level I students, only 5% of the clinical respondents indicated that the Level I supervisor was not a registered occupational therapist.

Goals and objectives are developed primarily by academic faculty, with comments from the clinical site personnel, and are provided to the clinical sites and students to give structure to the fieldwork experience. Students are engaged in Level I experiences essentially on a continuous basis throughout their academic career in occupational therapy. Sequential fieldwork placements are designed to provide new experiences and are usually structured to increase requirements and to build on previous experiences.

The Level I student is often a passive observer or an assistant in the clinical site and is seldom actively involved in the patients' treatment. Despite this passive role, however, one-on-one supervision of the student is at a high level. Further, the amount of supervision appears to be related to the type of fieldwork experience. Assignments in conjunction with the Level I experience are common and are graded by both on-site supervisors and academic program faculty. The student is usually formally evaluated by the direct clinical supervisor, and this evaluation is used in the overall course grade.
Discussion

Across all disability areas (e.g., physical dysfunction, psychosocial dysfunction), there appears to be an equal probability of encountering the individual variables as defined in this research. The first of two possible exceptions to this observation lies in the variable labeled amount of one-on-one supervision, in which statistically significant differences were found in both the discriminant analysis and the analysis of variance procedures. A second source of variation that merits further research is the use of academic faculty as direct supervisors in Level I fieldwork experiences. The 60% incidence of this type of supervision reported by the academic program respondents was much greater than expected and warrants further measurement.

The data collected in this study show that although the amount of Level I fieldwork experiences and student assignments vary, the implementation process of Level I fieldwork is similar across academic institutions and the various fieldwork settings. Further, this process of implementation is one of academic structuring and design, following the academic course sequence in subject area and level of assignment difficulty. Clinical site personnel are involved in this process in the areas of daily supervision, formal and informal evaluation, and formal and informal grading on assignments and overall performance. In this regard, the Level I fieldwork process closely resembles that of Level II placements.

The pattern of Level I placements closely follows the three most common areas of practice in occupational therapy: physical dysfunction, psychosocial dysfunction, and pediatrics. Moreover, the actual settings in which these placements occur tend to be traditional for occupational therapy: hospitals, schools, residential facilities, and rehabilitation centers.

Although the physical dysfunction settings averaged the greatest number of therapists on staff, they did not supervise the greatest number of Level I students. Rather, settings in the other category were most likely to take three or more students at a time, whereas physical dysfunction and psychosocial settings were most likely to accept only two Level I placements at a time. These findings may simply be the result of greater availability of physical dysfunction placements as opposed to placements in the other category or may reflect differences in the amount of supervision required for students in the particular setting. The findings may also reflect differences in financial concerns and expectations that may exist between the types of fieldwork settings regarding the time investment and cost in the supervision of Level I students.

The descriptive data, supported by the discriminant analysis, indicate that the other settings were more likely to have Level I students engage in hands-on treatment and evaluation activities than were the physical dysfunction and pediatric settings. Further, the psychosocial and other settings least often gave one-on-one supervision to their students (i.e., less than 50% of the time). These results may indicate that Level I students have already developed greater proficiency in skills essential for independent performance in the psychosocial and other settings or may simply indicate that less technical skills are required for independent student performance in these settings.

Pediatric therapists were more likely to supervise more than one student at a time. Further, pediatric supervisors tended to give one-on-one supervision most of the time (75% of the time) but also had low-level requirements for independent performance similar to those in other categories of fieldwork settings. These results suggest the possibility of an inordinate time investment by pediatric therapists in the supervision of Level I students or may reflect the teaching of new material within the fieldwork setting, rather than structured observation and participation as delineated in the Essentials (AOTA, 1989). Additional study is indicated to determine causes of or reasons for differences in levels of supervision between pediatric and other categories of fieldwork placements.

Study Limitations

The use of a questionnaire for the collection of data introduces threats to both internal and external validity. Due to the attrition of subjects from the study (approximately 50%), the possibility of significant error to the data set was introduced, and one must use caution in generalizing results. Further error is introduced when items are answered on the basis of the respondent's interpretation of the question without direct clarification by the researcher.

Conclusion

In this research, the variables that describe the overall fieldwork process were identified, and their relationships to one another were defined. Specifically, variables associated with the institutional demographics; structure and number of Level I fieldwork experiences; student scheduling and fieldwork activities; goals, objectives, and assignments; amount and type of supervision; and perceived productivity effects were compared across categories of fieldwork settings. The results showed a singular process for the implementation of Level I fieldwork placements, with an emphasis on traditional settings and format. Interesting differences were found among the categories of fieldwork placements in the areas of supervision...
Acknowledgments

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References


