Evaluating Level I Fieldwork Students: A Job Model

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Key Words: fieldwork education, occupational therapy • job analysis

This article describes how a job model, a behavioral engineering concept used to improve employee performance, was developed to evaluate the clinical performance of occupational therapy students in Level I fieldwork. The job model emphasizes accomplishments and provides immediate feedback on specific skills needed for the successful completion of Level I fieldwork. In a pilot study of 137 students from the Occupational Therapy Teaching Clinic at Western Michigan University, 68 of the students were evaluated with the job model and 69 were evaluated with Western Michigan University's traditional Level I fieldwork evaluation. The results showed that the job model provided a method by which to identify standard values for measuring accomplishments in Level I fieldwork.

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This article was accepted for publication November 14, 1989.
The Performance-Based Job Model

In response to these concerns and problems, we supervisors decided to use a new tool called a job model, which is based on behavioral engineering principles developed and expanded on by Thomas Gilbert (1978). Behavioral systems analysis, or behavioral engineering, principles have been used in industrial settings and have improved employees' performance (see, for example, Bushhouse, Feeney, Dickinson, & O'Brien, 1982; Gilbert, 1982; Kim & Hammer, 1976; Latham, Wexley, & Pursell, 1975).

The job model concept integrates the basic foundation of occupational therapy by applying principles of an activity analysis, or job analysis, which is a systematic procedure that identifies behavior critical to performing a job satisfactorily (Scott & Podsakoff, 1982). The job model embodies many occupational therapy principles: it is goal directed; it defines, analyzes, and classifies activities or jobs; it requires the student's mental and physical participation; it has meaning for the student in the sense that it gives daily feedback as reinforcement and produces a grade; it provides standard values with which to measure data; and it provides a means to model appropriate behavior and enhance performance (Pedretti, 1985). The job model is a job description that identifies precisely what students are responsible for, how their performance or accomplishments will be measured, the standards by which they will be held accountable, and the conditions that must be provided to help them meet those standards.

Design

The first step in designing a job model is to determine the accomplishments of the required job. Accomplishment is a generic term describing not the behavior, but the specific products of those behaviors. We use this term to show that accomplishments are products of value. They can be readily agreed upon by a number of supervisors, whereas behaviors to achieve the accomplishments cannot. We identified the following 10 accomplishments for Level I fieldwork:

1. Data collected
2. Initial report completed
3. Treatment plan completed
4. Weekly progress notes completed
5. Daily treatment plan completed
6. Oral report given
7. Good relations with client maintained
8. Good relations with supervisor maintained
9. Short-term objectives met
10. Clinic cleanliness maintained

The second step in designing a job model is to break each accomplishment down into smaller, more easily achieved steps (see Figure 1). This subaccomplishment, or activity, describes what the student must do to successfully achieve the accomplishment. If a particular activity needs further clarification or description, a form would be developed to guide the student's thinking and actions to ensure successful completion of the subaccomplishment.
The third step in designing a job model is determining the "dimensions of worthy performance" (Gilbert, 1978, p. 45). These dimensions, called requirements, represent classes of measurement for determining the extent to which an accomplishment has been met, such as quality, quantity, and cost measures. Quality measures involve accuracy of the accomplishment compared to an ideal; novelty or inventiveness; and class, which is the comparative superiority of an accomplishment beyond mere accuracy (Gilbert, 1978). For example, students who select appropriate evaluations for their clients must exhaust all appropriate testing possibilities without selecting any inappropriate ones before making a final test selection. They have surpassed merely selecting an evaluation tool, because they have investigated all appropriate measures. Quantity measures include timeliness, such as turning in written reports on time; cost measures include administrative time for management and supervision.

The fourth step in designing a job model involves setting standards by identifying exemplars. The exemplars in our situation were students who consistently performed the best. We observed clinic students for two semesters, looking for students who required the least amount of supervision, always turned in work on time, were always prepared, were organized, and solved problems innovatively. To obtain information from these students, we (a) observed how they did the job, (b) had them describe how they did the job, (c) analyzed their description of how they did the job, (d) explored their theories about job accomplishment, (e) made a list of the skills exhibited by the exemplar but not by the other students, and (f) made a list of critical differences between the exemplar and the typical student.

With this information, we were able to determine exemplary, as opposed to minimum, standards. All students are measured against these standards.

The 10 accomplishments were weighted to reflect the most critical, which were then assigned higher point values. The points were distributed based on the percentage value of each accomplishment. Hence, each accomplishment stood independently. For each measure, we determined who would rate the accomplishment. Students, supervisors, and clients all participated in rating various accomplishments. For example, Accomplishment 5, Daily Treatment Plan Completed, is rated by the students. The supervisor checks each student’s self-rating during and after each session and maintains a master list for each student. The job model describes precisely what the students are responsible for, how their accomplishments will be measured, the standards to which they will be held accountable, who measures their accomplishments, and the conditions that must be provided by supervisors to help the student meet those standards.

Pilot Study

To determine the effectiveness of the job model, we conducted a pilot study involving 137 students over five academic semesters. Sixty-eight students were randomly assigned to supervisors who used the job model and 69 students to supervisors who used the traditional Level I fieldwork evaluation. The supervisors were not told of the data collection procedures, although they were aware of the purpose of the pilot study.

We were interested in (a) orienting job model users and training them to identify problems, (b) obtaining supervisors’ commitment based on a successful test, and (c) determining if the job model was accepted and being used properly. To evaluate the success or failure of our model, we interviewed the students and supervisors and analyzed the grade distribution. Did the job model discriminate between good performers and poor performers? Was rater bias alleviated? Was the distribution of grades less skewed? Were the standards still relevant?

Results

In implementing the students’ job model, one of our first discoveries was that the clinical supervisors would also need a job model to supervise the students. According to Gilbert (1978), this need inevitably surfaces, as supervisors tend to assume that problems lie only with employees or, in this case, with students, and thus fail to believe that the system’s
success depends largely on higher management levels.

We also found that the clinical supervisors lacked orientation to and training in the job model concept. In our setting, community therapists and academic faculty serve as clinical supervisors on an intermittent basis, which results in their being unable to gain experience and consistency in learning the system and in their improper use of the evaluation. Interviews with clinical supervisors showed that those who had used the job model for more than two academic semesters favored it over the traditional evaluation tool.

The pilot study results indicated that the grades of the students in the job model group were distributed more evenly than the grades of the students in the traditional evaluation group, which tended to be high (see Figure 2). Although the shift in the distribution of grades approached a bell curve, this shift was not as dramatic as we had anticipated.

Discussion

We believe there may be several explanations for the bell curve shifts. First, in analyzing the exemplars’ performance, we may not have identified the many subtleties of their successful performance. Second, for the standards (units of measure), we chose timeliness criteria that were not necessarily exceptional, but realistic. The differences between the exemplars and the other students were probably in the areas of class and accuracy requirements. Supervisors requested model revision to increase quality measure ratings, which in turn, would have class and accuracy requirements. Third, we could not truly compare the two evaluations during the pilot testing because we lacked controls for internal validity.

Most of the students interviewed felt that they had to assume more responsibility through self-monitoring. They did indicate, however, that they used the exemplars in their groups as role models.

Interestingly, during the course of the pilot study, the most frequent student complaint was that they were forced to be more independent but wanted more supervision.

Conclusion

We found that with continued evaluation, follow-up, and revision, the job model has the potential to be a valid measure of student performance. We also found that the job model can help students develop the professional behaviors needed to succeed in Level II fieldwork and in clinical practice.

The supervisor interview results and the analysis of daily treatment plans revealed that, overall, the job model evaluation of students’ performance in the Level I fieldwork experience contributed to the following changes:

- Supervisors’ feedback progressed from subjective to more objective.
- Infrequent feedback increased to daily feedback through self-evaluation.
- Student self-monitoring (with validation checks by the supervisor) replaced supervisor monitoring.
- Unquantified rating became quantified rating.
- High grades for best performers took the place of high grades for all.

The job model may alleviate many of the problems found in evaluating the performance of students completing Level I fieldwork. The job model focuses on accomplishment instead of behavior, it sets the highest standards of performance in order to promote and reward excellence; and it provides a daily feedback system that encourages self-monitoring, thus fostering independence. By setting the highest standards, students’ capabilities can be more accurately identified and nurtured.

The job model is easily designed by the occupational therapist because of its emphasis on task analysis and the determination of measurable goals and objectives. It can be used to measure performance for a variety of clinical populations, and it incorporates appropriate incentives and reinforcers. As with any evaluation tool, the ongoing orientation and training of raters is essential for the success of performance-based job models. We believe that the job model will have continued use in Level I fieldwork at Western Michigan University.

The second phase of this project will involve validity studies, including interrater reliability of supervisors’ ratings of students, assessment of students’ perceptions of fairness of the rating and of learning while using the job model, and further analysis of exemplars’ performance.
Acknowledgment

This article is based on a presentation to the Commission on Education at the 66th Annual Conference of the American Occupational Therapy Association in Minneapolis, April 1986.

References


