A Needs Assessment Strategy for Educational Planning

(staff training, management planning)

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Increasing public concern regarding the quality and cost of health care, present economic conditions, employee expectations for participative management, and increasing awareness of career opportunities have mandated that the occupational therapy manager base education and training needs on objective and validated data. The needs assessment strategy is a technique that can be used to identify training needs, match these needs to organizational goals and resources, and allow for employee participation. Several assessment methods are discussed and a report format is suggested. A report of assessed needs, subsequent training, and positive outcomes resulting from training could be included in the departmental quality assurance report, as well as in the yearly managerial plan. Since using this strategy, the author’s department has been granted a substantial increase in monies for education and training.

With health costs presently spiraling and public interest in the cost and quality of health care increasing, management will more and more be asked to prove that monies spent on training and education will be cost effective, will improve quality of care, and will increase productivity. Managers will have to look closely at educational costs to prove that education and training requests are based on identified needs (1). Occupational therapy managers and consultants will be required to demonstrate why training is needed, how the results of training will be measured, and how such training will improve progress toward organizational goals. Such a requirement follows Dunn’s recommendation that occupational therapy managers develop accountability plans that are appropriate to their own settings and that will be of value to their funding agents (2).

Toedtman predicts that, as a result of social, political, and technological occurrences, there will be substantial and progressive changes in human resource management in the upcoming years (3). He states that these occurrences will not only increase the need for long-term planning, but will also require that managers train their staff to accept and respond to change with more knowledge and resilience. In addition, staff members will be better educated and more aware of career opportunities, and will insist on the opportunity to develop themselves as professionals. Managers will need to tailor training to meet not only long-range planning needs, but also to allow for participatory decision making in training and education. Shull and Krammer state that staff involvement should be incorporated into the management process in order to make maximal use of available resources (4). In defining operational management, Campbell states that it incorporates getting things done by directing the efforts of individuals toward a common goal, and also enables them to find personal satisfaction through involvement in their work (5). The needs assessment is increasingly being used to determine the needs of the organization as well as the individual and allows staff participation in management decisions that affect their work (6). As organizations continue to develop the open communication pattern of the systems model of management, employee participation will continue to grow in importance. Unfortunately, the needs assessment is often a reaction to a situational need for change rather than part of the integrated managerial plan. Baum suggests the use of the internal management audit to assess staff performance as it relates to departmental objectives (6). The needs assessment can be used with the internal audit process as a guide for both staff and management.
by subsequently identifying specific levels of training required as well as possible training methods and programs that could be used.

What Is a Needs Assessment?

Needs assessment refers to any systematic process used for collecting and analyzing data concerned with the training and educational needs of an individual or organization. Most information concerning the use of needs assessment is confined to the educational and training literature and deals only with identification of needs. I have attempted to collate such information and relate how it may be used to identify the educational and training needs of the occupational therapy department.

In developing the needs assessment, various measurements and techniques are used to obtain the data needed to define the "gap" between desired and actual performance, or the discrepancy between an existing set of circumstances and the desired set of circumstances. The most popular concept seems to be that the needs assessment measures the gap between "real" vs. "ideal" needs, or "actual" vs. "desired" needs. Knowles defines the circumstances that are solvable by training as those that concern knowledge, skills, attitudes, and communication (7). Problems other than those are usually caused by poor administrative planning or policy and will not be resolved by training.

Educational literature discusses the difference between "real" and "felt" needs. Felt needs are more likely to interests or desires of the individual, whereas "real" needs are objective deficiencies of an individual or organization. Real needs are based on validated data. Although felt needs can be used to motivate learners, real needs are used to guide and develop the educational plan.

Why Do a Needs Assessment?

The needs assessment is carried out to help determine the nature, extent, and priority of training needs; to assess preferences of staff for learning styles; to assist with departmental and organizational planning; and to provide data to justify decisions made. It is used to provide cates resources. In its final form the needs assessment becomes a single plan or proposal that shows the need for training, the objectives of planned activities, expected results, prospects for training, program outlines, expected conditions without training, and recommendations for training.

General Phases

A needs assessment is conducted in three phases (Figure 1). The pre-

Figure 1
A model for needs assessment strategy

<table>
<thead>
<tr>
<th>PHASE 1</th>
<th>PHASE 2</th>
<th>PHASE 3</th>
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<tbody>
<tr>
<td>Pre-Assessment</td>
<td>Data Collection</td>
<td>Reporting Pre-action</td>
</tr>
<tr>
<td>Determine general objectives</td>
<td>Select method(s)</td>
<td>Prioritize needs</td>
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<tr>
<td>Determine scope of study</td>
<td>Establish measures of need</td>
<td>Identify possible training sources</td>
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<tr>
<td>Review Policy</td>
<td>Implement study</td>
<td>Set objectives</td>
</tr>
<tr>
<td>Review post training</td>
<td>Interpret data</td>
<td>Prepare report</td>
</tr>
<tr>
<td>Will training solve?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NO</td>
<td>YES</td>
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assessments phase recognizes a general need and the extent of the need is evaluated. One considers the audience for which the assessment will be done and decides on the sampling size required to provide adequate, reliable information. For example, if the assessment is to canvass the entire nursing service of a nursing home in order to determine the need for and extent of rehabilitation knowledge, then one would
consider a sampling size that would be representative of the service, yet not too cumbersome to collate data easily. I have found the sampling procedures described by Williamson, Ostron, and Roswell (8) and Weisberg (9) useful. The general amount of time required for the assessment, monies needed, and expertise available for the assessment must be considered. It is helpful to review past training methods used, type of learning experiences preferred by the participants, and the types of learning situations that is feasible. Such review may also help to identify available resources for training as well as staff expertise that could be used in training programs. All policy documents referring to training should be reviewed in order to identify types of training funded in the past and preferred by management.

Phase 2 involves selecting the method of assessment. The various methods that will provide a measurable baseline of present knowledge and that will estimate knowledge that is desired or needed are studied. The capability of a method to provide the information needed within the budgetary and time framework is considered. The selection of two methods, rather than just one, will often augment information gathered: that is the advantages of one will offset the disadvantages of the other (10). For example, I have used information gained from a health accounting study (audit methods) with information gained from employee appraisals (interview methods). This enables one to gain concrete information regarding both real needs and felt needs of one's employees. Once the method(s) are selected and standards are established for measuring needs, the instrument is designed and distributed. In the final step of Phase 2, data are collated, interpreted, and the actual performance level is compared with the desired performance level.

Phase 3 is the decision-making phase. It involves prioritizing identified needs and developing training methods to meet those with the highest priority. When ranking needs, the following are considered: severity of the problem, the number of patients affected, the number of staff involved, the available resources, the impact potential, and the willingness of potential learners. This phase concludes with a report, which should include prioritized needs identified, programs recommended as well as their availability and cost, training objectives, expected results, and expected conditions without training, as well as recommendations.

Assessment Methods
Several methods may be used to conduct a needs assessment but those most likely to be used in an occupational therapy department fall into three categories: surveys, audits, and individual interviews. Each has certain advantages and disadvantages (Figure 2).

Survey instruments range in complexity from a simple checklist of desired needs to a carefully constructed and validated questionnaire. Those that are carefully developed and interpreted will ensure validity and reliability. Although many social science research materials are available, Weisberg and Bowen (9) are helpful regarding the wording of questions and design of the questionnaire. Various surveys that can be used are:

The Delphi survey—a four-step process that consists of identifying a particular problem area, requesting respondents to rank problems in the particular area, statistically evaluating responses, and having respondents re-rank listed areas. This process is continued through three rankings until a final measure of the problem is gained. The Delphi survey is most useful for forecasting future training needs.

Problem identification—usually used with the group for which training will be provided. The use of group interaction in identification of problems can result not only in clearly defined problems but also in creative solutions (10). This method can include brainstorming, nominal group process, and in-basket suggestions. Group problem identification can also be done by using cards where each person lists one problem on a card until all problems are exhausted, then the problems are classified into like areas by a task group. The task group attempts to establish training goals for each problem classification.

The Employee attitude survey—in which employees are surveyed regarding job satisfaction. Although easily used, the results are difficult to analyze and categorize (11).

Audit methods—which can provide a wide variety of information. Shiff and Krammer recommend that one look for "problem indicators" through operational audits (4). Operational audits use information from operational factors such as productivity measures, personnel turnover rates, absenteeism and sick leave usage, future promotional planning, staff to patient ratios, incident reports, and other studies. Functional audits are used to gain information regarding gen-
eral activities, such as team conferences, evaluation methods, and effectiveness of treatment. One may use various audit materials such as health accounting studies, patient care evaluation studies, reports from utilization review committees, or accreditation visit reports of such organizations as the Joint Commission of Accreditation of Hospitals, Health Systems Accounting, and Professional Service Review Organizations.

Individual interview—the most commonly used method for assessment, the interview process may be formal or informal, and can be used in conjunction with periodic performance appraisals. A structured interview will usually provide the manager with more information than an unstructured one. The interviewer should seek answers to such questions as problems encountered on the job, improvements that could be made in the department, relationships with associates, aspects liked and disliked about the job, personal goals, career aspirations, and felt needs for additional skills or knowledge. Individual methods range from exit interviews to requests for training, formal testing of knowledge, simulations, role-plays, observation of behavior on the job, and employee performance appraisals.

Report of Needs

The scope and framework of the final report depends upon the audience being addressed. While the education department may only require information regarding identified needs, the administration may require not only a justification for the use of resources, but also an explanation of the primary causes of identified needs, a specific statement regarding actual and desired performance, what is needed to correct the deficiencies, as well as recommendations. Deficiencies and recommendations are categorized in the separate components of knowledge, skills, attitudes, and communication. Graphic illustration, tables, or charts are useful to provide the administration with a quick overview of the needs and training and their relationship to increased productivity or quality of care.

Today most health care organizations advocate cost effectiveness and improved productivity. The needs assessment strategy provides a vehicle to address both of these. It can help to ensure that health professionals will have the skills to work effectively and efficiently. Through staff participation in the needs assessment, job satisfaction can be improved and thereby decrease job turnover. Its use will help
to identify existing personnel that could be used as trainers. By increasing the manager's awareness of staff needs, the manager can more readily identify ongoing resources that could be used for training and can cooperate with other services in planning joint training programs.

Discussion

The format I like to use in writing an assessment plan for managerial review begins with a listing of methods used to assess needs, followed by written objectives and specific training plans developed to achieve these objectives. Written objectives enable one to determine when needs have been adequately met. Each objective is followed with a brief statement about the problem that exists because of a need or what can be expected to happen if this need is met. This helps management to know exactly what improved outcome they can expect from spending funds for recommended training. The training plan following each objective identifies specific topics of training, names and qualifications of presenters, staff who will participate in training, amount of funds requested, and plan for incorporating new knowledge, skills, abilities, or communication patterns into the present therapy program (Figure 3).

When identifying the possible training resources, I order them into three categories: resources staff can use independently, resources available within the facility, and resources available outside the facility. Resources that staff could use for self-study or group discussion are readily available, inexpensive, and can be very specific to identified need. The American Occupational Therapy Association publications offer information on current books, films, and videocassettes, as well as

![Figure 3](link)

**Annual needs assessment of education and training (sample format)**

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<tr>
<th>Occupational Therapy</th>
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<td>Date: February 1982</td>
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I. Needs determined by
   A. Questionnaire
   B. Problem identification

II. General training objectives
   A. All staff will demonstrate ability to design and implement a five-stage health accounting study that results in improved care.
   B. All staff will demonstrate proper hand splinting construction techniques using bioplastics and as measured by a five-point scale.

III. Off station training
   A. Topic: Health accounting
      Presenter: AOTA conference, Health accounting institute
      Participant: Chief OT
      Where: Portland, OR
      When: April 1982
      Amount of funds requested: $400.00
      Amount of funds personally used: approximately $400.00
      Objective: To improve knowledge of new health accounting process being advocated by JCAH and AOTA

IV. On station training
   A. Topic: Health accounting
      Presenter: Chief OT and quality assurance coordinator
      Participants: All OT staff and interested others
      Where: OT clinic
      When: May 19 and 19, at regularly scheduled staff meetings
      Amount of funds requested: None
      Objective: Each participant will verbally identify the five stages of health accounting.
   B. Topic: Splinting with bioplastics
      Presenter: Company Doe
      Participants: All OT staff and interested others
      Where: OT clinic
      When: Date to be set
      Amount of funds requested: $200.00
      Amount of personal funds used: none
      Objective: Each staff person will demonstrate proper splint construction techniques as measured by workshop presenter.

V. Self-study training
   A. Topic: Quality assurance
      Method: Selected staff will read and lead discussion of selected articles on quality assurance
      Where: OT clinic
      When: At regularly scheduled staff meetings in June 1982
      Objective: All staff will verbalize knowledge of assigned readings as measured by peer review

VI. Proposed method to incorporate learning
   A. All OT staff will be rotated through the quality assurance committee of rehabilitation medicine service; each member serving a 3-month period.

Six-month assessment toward goals
   A. One-half of OT staff have been rotated through the QA committee and have demonstrated ability to design and implement one health accounting study.
   B. Each staff member has constructed two splints using bioplastics. Splints meet physician and patient satisfaction requirements.
current practice and research. Medical libraries may offer computer search services, and have several indexes that permit one to find current information on a specific topic. A search of one's own facility should include a discussion of training needs with other disciplines, who may have similar needs and be willing to jointly sponsor educational programs, may have staff knowledgeable and willing to develop workshops for the occupational therapy department, or may know of upcoming workshops that may relate to the department's needs. Information gained from outside sources can come from discussions with the state occupational therapy organization as well as professional organizations or related disciplines and universities. A thorough search of possible resources will allow one to offer a variety of training and education materials in a cost-effective manner.

The final timetable of training and education should allow adequate time for staff to incorporate newly learned information into their therapy expertise so that learning can be maintained.

A six-month assessment of progress toward goals can help to pinpoint areas where additional training may be needed to reach objectives, as well as areas where training objectives have been met. This ensures that funds are not unnecessarily used.

Summary

Needs assessment was first mentioned in the educational literature in 1969. Much research still needs to be done in the areas of testing the effectiveness, validity, and reliability of the various assessment methods. However, the needs assessment does help to obtain data to define the gap between "what is" and "what should be." Many variables contribute to the cost and quality of health care. A needs assessment will not capture all of the variables; however, it will increase the occupational therapy department's credibility and will relate objectives to the managerial plan. Budgetary consideration is more readily provided for real needs based on normative and demonstrated need rather than on perceived needs. Since using the needs assessment strategy, the amount of educational monies provided to our department has increased. This increase has been caused by the improved identification of specific needs, training programs available, and specific costs required to reach objectives. The use of this strategy has also enabled the identification of personnel within our facility who can develop training modules, and the identification of training planned by other departments that need to be used by occupational therapy staff. The final report outlines the steps required to achieve improved performance and quality of care, therefore, the steps that cannot be operationalized during the present budget period can easily be reviewed for need on subsequent assessments.

Whichever methods are used in conducting the needs assessment, information collected should be relevant to training and should identify needs that can be solved by changing skills, improving knowledge, changing attitudes, and improving communication. All techniques have some merit, although the strongest support seems to be for survey methods and individual interviews. Since there is no "one best method," the developer should feel free to adapt the methods to his or her own situation through reviewing existing methods or by using a combination of several methods.

REFERENCES

1. Cook M: Training isn't a cost—it's a blue-chip investment. Train Dev J 34: 4-7, 1980

RELATED READINGS


Coffman L: An easy way to effectively evaluate program results. Train Dev J 33: 28-32, 1979


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