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ABSTRACT

The We Do--They Do Model provides an evaluation methodology that service providers can use on a small scale to obtain data for themselves and for the over-all system. The model allows for complete assessment of ongoing program implementation and outcome. Three questions are used to organize evaluation activities: (1) Did staff (We) do what we said we were going to do? (2) Did participants (They) do what they were supposed to do? and (3) If everyone did what they were supposed to do, how would we know if it did any good? These questions allow for evaluation of program activities and outcomes for both formative and summative purposes. It focuses on staff activities, client activities, and the outcome of these activities. The Model allows for relating of outcomes to program goal activities. It is useful for establishment of objectives, identification of specific treatment activities, and establishment of assessment methodology. Key aspects of the Model are a focus on evaluation of treatment integrity, and a simple reporting method that service staff can use with minimal disruption of activities. Use of the model is illustrated in the evaluation of the University of Nebraska's Educational Center for Disabled students. Computer technology was used as an intervention to train disabled college students. Objectives included improvement in attitudes and in academic performance. (MAC)

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WE DO - THEY DO: A MODEL FOR PRACTICAL
SERVICE PROGRAM EVALUATION

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ABSTRACT

This paper provides an overview of the We Do - They Do program evaluation model. The We Do - They Do Model focuses evaluation efforts on staff activities, client activities, and the outcomes of these activities. The Model is useful for establishment of objectives, identification of specific treatment activities, and establishment of assessment methodology. Specific examples of the use of the Model are provided.

WE DO - THEY DO: A MODEL FOR PRACTICAL SERVICE PROGRAM EVALUATION

Paradoxically, evaluation is often easier to accomplish on a system wide as opposed to individual program basis. In many cases evaluation of a school district or statewide service system can be more effectively implemented than evaluation of particular classrooms or service delivery units. There are a number of reasons why this paradox exists. Funding at the system level can be allocated for evaluation activities, while individual program budgets rarely contain adequate, if any, budget for evaluation (DeStefano & Stake, 1986). Expert staffing, either in-house or by outside consultation, can be obtained for evaluation system-wide, while individual programs must often rely only on existing service delivery staff who have little, if any, training or experience in evaluation activities. Large data-bases may exist at the system level that can provide information for summative statistical evaluation, while individual programs often must rely on qualitative data such as case notes.

Differences such as these make evaluation of small scale individual programs difficult, however, the evaluation of actual service delivery at the program level may, in many cases, be more critical than overall system-wide evaluation. It is the direct interactions of service providers with clients or students that primarily determine client or student outcome. Activities at the service provider level often do not follow system-wide guidelines, leading to questions of treatment integrity that remain unanswered in system level evaluations. It does little good to evaluate a new curriculum at the district level if individual teachers are not following the curriculum. Similarly, it does little good to evaluate a

state-wide service program for a target population (e.g. mentally retarded or delinquent/pre-delinquent) if the individual provider units are all using different treatment methods and procedures.

In addition to treatment integrity issues, there are often significant differences between the evaluation needs of the system and the individual service units. System-wide evaluation is concerned with broad issues of cost-effectiveness, effectiveness of service delivery to population groups, general outcomes for target populations as a whole, staffing, budgeting and information flow within the bureaucracy. Stakeholders at the system level include broad groups of funders, political units, and community groups for whom information must be generated in formal reports. Individual service units, on the other hand, need information on the effectiveness of day-to-day activities and on outcomes for individual clients. There is less need for budgeting and cost-effectiveness information, since the individual unit may have little or no control over these areas. Stake holders are much more limited in most cases, perhaps being limited to higher levels in the system and the individual clients, for whom reporting may be only semi-formal or informal.

While system-wide evaluation can attempt to accommodate these diverse needs, the system-wide evaluator usually can only sample individual provider units. Thus, there is little data available on day-to-day activities and on differences across provider units. To address the evaluation needs of service providers evaluation methods must be developed that can allow service provider units to conduct evaluation of their ongoing activities and generate data that is relevant to both themselves and to the system. These methods must be

powerful enough to allow the collection of relevant data, yet be simple enough to be implemented by persons with little formal training and with little time for evaluation activities.

The WE DO - THEY DO model was developed to provide an evaluation methodology that can be utilized by service providers to assess ongoing program implementation and outcomes. The remainder of this paper will provide a description of the development of the Model, an overview of Model operation and examples drawn from the Educational Center for Disabled Students concerning use of the Model.

Background

The Educational Center for Disabled Students was established at the University of Nebraska-Lincoln as a demonstration project through funding by the U.S. Department of Education (CDFA 84.078C, Grant# G008530057). The Center provides computer technology and skill training to a diverse population of disabled college students (physically disabled, visually impaired, learning disabled, hearing impaired) with three goals:

1. Improve student academic performance and attitudes towards success in college through the use of computer technology and academic skills training.
2. Establish the Educational Center for Disabled Students utilizing appropriate computer equipment and software.
3. Disseminate model project information concerning computer technology and academic training to prospective students, parents, the business community and other post-secondary

institutions.

These goals specified the direction that Center activities would take.

Since the Center was established to test the feasibility of implementing a broad technology based intervention program for disabled college students and to determine the effectiveness of such a program in enhancing academic performance, a comprehensive evaluation, including both formative and summative aspects was required. As a demonstration project there was a substantial dissemination component that required the collection and reporting of a broad range of information to diverse groups.

While a substantial evaluation need existed within the program, few resources were allocated to evaluation activities. Outside evaluations had been established with faculty at the University of Nebraska to assess attitude change and progress in writing with budgeting for both consultant time and graduate assistants to work with these aspects of evaluation. No specific staffing and no funds were allocated within the grant for other aspects of evaluation. Since the Center was staffed with one full-time coordinator and two half-time graduate assistants who had administration, budgeting and program delivery responsibilities, there was limited personpower for conducting evaluation activities. Thus, any evaluation would have to be done within time constraints imposed by the small size of the Center staff. Also, since the program was the first of its kind, there was little direction as to how the technology could be used and what were reasonable outcome expectations. The evaluation, therefore, had to be flexible enough to provide direction, yet still allow for potentially substantial changes in program direction and outcomes.

We Do - They Do was created to address these evaluation needs and overcome the constraints of limited staff and financial resources.

The Model

The WE DO - THEY DO Model uses three questions to organize evaluation activities:

1. Did staff (We) do what we said we were going to do?
2. Did participants (They) do what they were supposed to do?
3. If everyone did what they were supposed to do, how would we know if it did any good?

While simple and straightforward, these the answers to these questions allow for a complete evaluation of both program activities and outcomes. In addition these questions can be answered by program staff from data generated in the course of regular program activities.

WE DO

The first question in the Model concerns staff activities, and asks whether designed activities were completed as specified. The following steps are used to answer the We Do question:

1. Determine what activities must be done to meet the program goals.
2. Determine how identified activities will be accomplished.
3. Determine what documentation and reporting needs are related to staff activities.
4. Determine how reporting needs will be met.

The first step requires the identification of program activities

that will be implemented to realize program goals. Goal statements for service programs generally are specified at higher systems levels or, as in the case of the Educational Center, are specified in funding grant proposals. These goals are generally vague and unspecific as to what actual activities will be done in the program. This necessitates specification of the actual day-to-day activities that will need to be done if the goal is to be realized.

Step 2 is to determine how identified activities will be accomplished. This step gets at the heart of the We Do question by providing specifics on what will be needed to do the stated objectives. At this step staff needs to specify types of interventions or instructional methods, curriculum, instruments, and procedures that will implement the objectives. This step involves operationalizing objectives into specific behaviors and procedures. Essentially, terms such as teach, treat, train, evaluate, assess are defined in terms of staff activities.

Step 3 of the We Do question is to determine what documentation and reporting needs are related to staff activities. The focus of this documentation is not on outcomes; rather, it is on identifying what information is needed to know if staff activities were done as specified. Generally, there is one reporting need for each staff activity identified in Step 2 of the We Do question. For example, if a staff training activity was to occur there is a need to document what took place, when the training occurred, who attended, and so forth. There may be additional needs to provide reports such as monthly or quarterly summaries of training or other activities. These types of reports would allow staff to see the broad scope of activities and

answer questions such as are training activities balanced or has training been focused on only some areas with others being neglected.

Step 4 is to determine how reporting needs can be met. This step involves identifying instruments and methods that can be used to collect data. An important consideration at this step is the time and staff resources that can be allocated to documentation and reporting. Documentation of staff activities should not require extensive extra work for staff. Thus, log sheets or activity reports that provide records of when and where staff activities occurred are the preferred reporting method.

THEY DO

The second question in the Model concerns client activities, and asks whether clients performed the activities assigned to them. A similar series of steps to those in the WE DO question are used to assess client activities as follows:

1. Determine what activities clients are to engage in.
2. Determine what documentation and reporting needs are related to client activities.
3. Determine how reporting needs will be met.

The first step requires identification of what activities clients will actually be doing in the class or program. As with staff activities there is a need to specify the types of day-to-day things clients will be doing. This is different from specifying client goals or objectives in a treatment plan or lesson plan. Most programs have client outcomes specified; however, these behavioral or other objectives relate to the hoped-for result of staff and client

activities. These objectives are like the staff goals and objectives. While they provide direction to activities, they do not say exactly what the client will do in the course of realizing the objective. Objectives must be translated into activities that will be done by the clients during the program or class. The key need in step one is to specify what clients will be doing with their time in the program.

Step 2 is to identify documentation and reporting needs. As with staff activities, the focus here is on documenting that clients actually did the activities specified, rather than on documenting any outcomes of the activities. Key issues would be such things as:

1. did clients attend scheduled sessions?
2. did clients do practice activities?
3. did clients complete homework?

Again, there will generally be one documentation need for each activity and additional summary reports.

Step 3 is to determine how reporting needs will be met. This requires identifying measures and instruments that can be used to record client activities. As with staff activity reporting, most service or educational programs keep records on client activities such as case notes, attendance sheets, and records of assignment completion. Thus, We Do - They Do data collection need not appreciably increase the amount of recording required by implementation staff. The key aspect of the We Do - They Do Model is that case notes and other records should be directly tied to the specific activities clients will be doing in the course of the program.

HOW DO WE KNOW IF WE WERE EFFECTIVE

Up to this point outcomes have not been specifically addressed in the We Do - They Do Model. A key point in the Model is that outcome questions must follow activity questions. Only after staff and client activities have been specified and documented is it appropriate to ask questions concerning results. Clearly there are anticipated outcomes prior to the establishment of a program that are given in grant proposals or in system level specifications. In the We Do - They Do Model, however, outcomes are re-examined and specified after staff and client activities are determined. Four steps are used to answer the effectiveness question as follows:

1. Determine what outcomes can be expected to result from staff and client activities.
2. Determine how outcomes can be measured and what data exist that could be used to measure change resulting from program activities.
3. Determine what methodologies can be utilized to assess the data.
4. Determine what reports are needed to distribute outcome evaluation results.

Step 1 in the effectiveness evaluation is the most critical and often the most inadequately done in both program and system wide evaluations. Step 1 involves examining staff and client activities that were identified and determining what changes in client behavior and what outcomes could be expected to occur if all activities were successfully accomplished. While this seems logically apparent, often there is little direct relationship between what goes on in a program and the outcomes that are evaluated. For example, an often evaluated

outcome in delinquency programs for adolescents is recidivism. While this is obviously a hoped for goal, in many cases there is little direct relationship between program activities and recidivism. While funders, system level decision makers, and outside stakeholders may require that projects show impact on areas such as recidivism, implementation personnel need to know whether their activities were successful at doing what they were intended to do.

In the We Do - They Do Model the process of tying outcomes to activities begins when staff activities are specified in relation to program goal statements (which usually contain broad, hoped for outcomes). After activities are specified, however, possible outcomes of these activities are then identified. The end result of this process is an exact specification of outcomes that could be expected to result from program activities. Once the direct outcomes activities are identified, indirect outcomes can be examined. Indirect outcomes would be things like recidivism or test score improvement that may result from the program but do not necessarily directly follow from the activities done.

Step 2 involves the determination of how outcomes can be measured and what data are available to assess program outcomes. Since We Do - They Do is designed to be implemented at the service provider level, measures and data must be obtainable and implementable by service personnel within time and staffing constraints. As with documentation of activities, measures and data are ideally obtained from ongoing records that are routinely collected.

Where necessary additional outcome evaluation data can be collected to supplement program activity data. Generally, this type of

information will be needed to address indirect outcomes (e.g. recidivism or improvement in grades). The impact of this data collection on staff resources can be lessened by establishing reasonable time frames for collecting this data and collecting a minimal amount of outside data. Since ongoing treatment data supplies information on the immediate results of program activities, there is no reason to rely on indirect goal data to document activity effectiveness. Therefore, data on indirect outcomes need only be collected infrequently, over a long enough time frame for results to be apparent.

Step 3 is to establish the methodologies and research designs needed to assess the data. An important aspect of We Do - They Do is that a substantial amount of activity information is generated that allows for evaluation beyond testing at the start and end of a program. Regression techniques can possibly be used to relate particular activities to measured outcomes or time series analysis may be used to track change across classes or counseling sessions.

Step 4 is to identify what reports are needed to distribute evaluation data to stakeholders and higher system-level personnel. This step may vary considerably depending on the circumstances of the program. A classroom teacher may only need to provide a summary to the school or district, while a grant funded program may have to provide a formal report or publish results. As with all We Do - They Do activities report generation should be kept to a minimum and be consistent with available time and staff resources.

Application of the Model

The evaluation of the Educational Center for Disabled Students will be used to demonstrate how the We Do - They Do Model is implemented. In this example, one aspect of the Educational Center's goals will be developed into a We Do -They Do evaluation.

Goal 1 of the Educational Center states that the Center will attempt to:

Improve student academic performance and attitudes towards success in college through the use of computer technology and academic skills training.

While providing an overall direction to the program, this goal does not indicate how computer technology and skills training will be accomplished and thus, does not indicate specific staff activities. We Do procedures were applied to this goal to develop more specific objectives with the following objectives identified by staff and the advisory committee:

1. Evaluate student needs for adaptive hardware/software and skill training in academic areas.
2. Provide training in adaptive hardware/software for areas identified in evaluation.
3. Provide training in academic skill areas identified in evaluation.

These objectives defined the types of staff activities that would be needed to meet goal one. The remainder of the application example will focus on objective 2

Step 2 in We Do involved operationalizing these objectives into specific methods and training activities. Objective 2 stated that

staff would provide training in adaptive hardware/software for areas identified in evaluation. To accomplish this objective it was necessary to determine what hardware and software would be used in the Center, what types of training would be required for students to use the equipment (e.g. keyboarding, software operation, etc.), how training would be done (e.g. group or individual instruction), and what training material should be used (e.g. in-house developed, packaged curriculum).

Once the training activities were identified, Step 3 reporting needs were considered. It was determined that critical reporting needs were:

1. What equipment and software were staff training students to use.
2. What training staff were doing and how often it occurred.
3. What types of other student contact were staff doing and how often.
4. What training materials were being used.

These reporting needs focused on how staff was implementing training and what types of materials were being used to conduct training.

Step 4 of We Do was implemented by identifying methods for accomplishing needed reports. Since reporting needs related to keeping track of client contacts, training sessions, and materials a staff log was developed allowing staff members to quickly indicate needed information on who was worked with, how long the contact lasted, what was done, and what was used. For formal group training sessions, a summary sheet was prepared to indicate attendance and what was done during training.

Following the specification of staff activities the They Do question was addressed. Objectives for each student were specified following an intake assessment. Typical objectives specified training in using particular software, using computer equipment, or training in educational skills. Once these objective were identified, Step 1 of They Do was addressed to specify student activities. For example, an objective stating that the student would learn to type to a level of 20 words/minute was translated into activities such as:

1. Client will attend an orientation session.
2. Client will attend three typing instruction sessions.
3. Client will spend 30 minutes per day doing self-instruction using the Typing Tutor program.

In each case these activity objectives specify specific things the client will be expected to do.

Step 2 involved identifying reporting needs. The primary reporting needs related to student activities were to know:

1. Did students attend scheduled activities.
2. Did students complete homework assignments.
3. What equipment and software were students using to do school work.
4. What kinds of school work were being done with the computers.

Once these needs were identifies, Step 3 was addressed. To meet student reporting needs an activity log was again used. Students keep logs of their time using computers, other equipment and training materials both within the Center and outside the Center. These logs provide infr .ion on client activities on a day-to-day basis.

Information on attendance and homework completion was available on

staff logs, so no additional reporting was needed in these areas.

Once both staff and student activities were specified, effectiveness issues were addressed. The first step in the effectiveness evaluation was to identify expected outcomes. In the Educational Center, staff activities are oriented toward training computer and software usage, and improving study and other academic skills. For example, training in typing is provided. A direct outcome of this training should be increased typing speed. This is, therefore, the outcome measure for typing instruction. Similarly, outcomes were specified for each staff and client activity that would indicate whether the activities were successful.

In the case of the Educational Center, indirect outcomes were such things as improved course grades, increased graduation rates for disabled students, increased credit hour loads, fewer dropouts, and more admissions. These are all outcomes that could be expected to follow from a program that provides training in academic skills and training in using technological equipment that allows disabled students to improve their writing and take less time to do school related tasks. It is important to note, however, that these outcomes do not directly result from program activities and that all training could be successful without affecting these measures.

Step 2 was to determine measures and data. In the Educational Center extensive pre-post testing and ongoing assessment was used to generate data for evaluation of activities. For example, the computerized typing instruction program utilized saves information on errors and speed that can be printed. Information is, thus, available following each lesson or practice session on measures relevant to

improved typing skill. Notetaking and study skills training materials contain worksheets and tests that could be graded and recorded. In other cases performance tests were used to assess the students ability to operate the computer, load programs and run software. General case notes were also used to record the level of performance and staff impressions at each session.

Step 3 was to determine the methodologies for assessment. For assessment of direct outcomes a charting procedure is utilized. Performance at each session is charted and trends over time are analyzed by observing increases or decreases in performance over time. Since effectiveness evaluation of activities was for internal use no statistical procedures have been used to date. For assessment of indirect outcomes pre-post, between groups, and regression designs were all employed. Appendix A provides an example of the statistical designs related to writing improvement.

Step 4 was to identify reporting needs. Since the Educational Center was funded as a demonstration project a broad range of reporting was required. Reports to funders were needed to summarize activity outcomes and indirect outcome results. Presentations and papers to professional groups were needed to provide information on interventions, equipment and training activities. Information on the program was to be distributed to schools and prospective students concerning available services and equipment. Finally, reports to the business community on potential worksite modifications for disabled workers were required. All of these reports could be compiled from available activity and outcome data generated through We Do - They Do evaluation.

Summary

This paper has presented an overview of the We Do - They Do Model for service program evaluation. The Model is geared toward evaluation of direct service delivery programs. The Model orients evaluation activities in relation to three questions:

1. Did staff (We) do what we said we were going to do?
2. Did participants (They) do what they were supposed to do?
3. If everyone did what they were supposed to do, how would we know if it did any good?

These questions allow for evaluation of both program activities and program outcomes for both formative and summative purposes. Key aspects of the Model are a focus on evaluation of treatment integrity and a simple, straight forward methodology that can be implemented by service staff with minimal disruption of program activities.

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APPENDIX A

EDUCATIONAL CENTER FOR DISABLED STUDENTS SUMMATIVE EVALUATION

Program Goal 1.0 - Improve student academic performance and attitudes

Objective 1.6 - Evaluate progress in student writing resulting from use of adaptive hardware/software

EVALUATION OBJECTIVE	MEASUREMENT		DATA COLLECTION		DATA ANALYSIS	
	INSTRUMENTS	BASELINE	METHOD	SCHEDULE	DESIGN	GROUPS/MEASURES
1. Increase writing abilities of students in center relative to disabled students not in center	Writing samples	Preliminary writing score	Collect writing samples from students in center and group of disabled students not in center. Score pre and post samples blind using holistic scoring.	Test at beginning of school year (Sept.) or at entry to program.	Between groups pre - post comparison, using last two writing samples.	1a. Disabled students not in center (Control) 1b. Center students (Experimental)
2. Determine degree of relationship between use of center equipment and improvement in writing	Writing samples (Criterion) Use logs (Predictor)	N/A	Collect writing samples from students in center. Score pre and post samples blind using holistic scoring and compute difference score for each student. Compute total center use time and time on specific equipment from logs for each student.	Test at beginning of school year (Sept.) or at entry to program for writing sample. End of school year for log summary.	Regression of log data on writing difference scores	1a. Writing difference scores (Criterion) 1b. Total use time for center (Predictor) 1c. Use time for specific equipment (Predictor)