

Middle Georgia State University
OTA Program

Fieldwork Educators Inservice

Objective Fieldwork Student Evaluation

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Objective Fieldwork Student Evaluation

Agenda

I.	Welcome Introduction/Objectives	5 - 10 mins.
II.	Lecture/Activities	45 mins.
III.	Wrap-Up/Questions/Assessment	<u>10 mins.</u>
	Total Time:	1 Hour

OBJECTIVES

1. Identify planning tasks needed for objective evaluation
2. Demonstrate the ability to write on-site specific learning objectives
3. Identify types of evaluation
4. Identify types of evaluation interpretation
5. Identify alternatives to direct observation as a source of obtaining evaluative information
6. Discuss common errors made in using rating scale evaluations

Instructor: Jessica Pipkin, COTA/L, Academic Fieldwork Coordinator

How to be Objective in Evaluating the Fieldwork Student

Evaluating the performance of the fieldwork student is a time-consuming and often difficult process for the fieldwork educator. Fieldwork educators often worry about being overly lenient or harsh. They fear hurting the student's feelings. Students often complain that the fieldwork educator's assessment of their performance is subjective and unfair. Evaluation is often not a pleasant process for either student or fieldwork instructor.

Fieldwork educators often look for support from their peers to validate their impressions. They try to generalize from events they have observed to project future clinical performance and suitability for entry to the professional field. Students fear that every slip-up and forgotten comma will show up as a negative comment on their evaluation. Clearly students and fieldwork educators enter the process with different perspectives. How can we design an evaluative experience that meets the needs of the fieldwork educator, the student, the academic program and the profession at large?

The first step involved in student evaluation is:

Planning

Planning for the entire fieldwork experience

- Planning is needed for effective fieldwork experience, as well as to be able to objectively assess a student's performance.
- Fieldwork educators and academic instructors are concerned with developing competence in a number of key areas of practice.
- Plan must reflect integration of progressive levels of competency and specific competency-based content areas

Activity #1:

In pairs/groups, identify points about student development to consider when planning a fieldwork experience; i.e. some students are more prepared than others.

The Planning Process

Instructional designers use models that include four key elements:

1. Establishment of expectations and objectives of the learning experience.
2. Identification of a means to evaluate the achievement of these objectives.
3. Design of learning activities to meet the objectives.
4. Evaluation of the effectiveness of the learning experience and revision as necessary.

In following a systematic instructional design process, instructors are able to control learner progression evaluate learner performance, creatively develop available learning experiences and revise or alter the plan as necessary.

The process is a cycle, where one can enter at any point. When starting the planning process, it helps to start at the top of the circle. In identifying objectives, however, as the student or fieldwork educator finds problems with the fieldwork learning experience, it becomes clear that the program needs to be revised and thus the cycle begins again. The beauty of the system is that it is **expected** that the fieldwork learning experience will need revisions and will become increasingly **more responsive** to the student's needs by repeating this process.

1. Establish expectations and objectives of the learning experience.

Most academic programs provide the fieldwork educator with specific objectives for the experience. Sometimes these objectives are so broad and non-specific that the fieldwork educator is wise to review these expectations in the context of the experiences available in his or her clinical setting and revise them accordingly.

An effective learning objective is comprised of three parts:

- a. an action verb
- b. criteria to be met which will demonstrate satisfactory performance
- c. conditions under which the learner will perform

These three parts reflect what you want the learner to do with whom, or under what condition and with how much independence. When any of these parts are missing or ambiguous, it is difficult to know HOW to evaluate achievement of the objective.

Activity #2:

Try to identify these three criteria in the following objective:

"Performs accurate measurements of muscle strength in patients with varied neuromuscular and musculoskeletal disorders."
(from the Blue MACS-Mastery and Assessment of Clinical Skills, 1981)

Three criteria:

- (a) action verb = perform
 - (b) criteria to be met = "accurate measurements"
 - (c) conditions under which learner will perform = "patients with disorders"
- *What is ambiguous or unclear in the above objective? What questions would you have about the above objective?*

First, we might focus on the term "accurate" and wonder "how accurate"? This is not defined and rests on the subjective judgement of the clinical instructor.

Next, we might comment that patients with "varied neuromuscular and musculoskeletal disorders" can *vary* quite a bit! The patient who presents with single joint involvement is certainly much less complex than the patient who presents with a disseminated disease process affecting all muscles!

Then, we might ask "how" is this performed? Independence seems to be implicit in the objective, but this may not be realistic for a student who is beginning his or her fieldwork. This objective might be called a *terminal objective* or a *competency* to be achieved as criteria to be entry level. But it certainly is not a reasonable expectation for an early fieldwork student, especially working with a complex patient.

The process of establishing realistic expectations involves identifying what you want the student to do, with which patients, and with how much independence.

2. Identify a means to evaluate the achievement of these objectives.

If you've done a good job of establishing the objectives and expectations of the learning experience, you will be able to easily identify a means to evaluate achievement of the objective. The criteria that are identified in the objective can serve as our guideline for how we will assess achievement of the objective.

These criteria describe student performance. Let's look at another objective and identify what means might be used to evaluate student performance.

- *What means can you use to evaluate the achievement of this objective?*
"Listens attentively and maintains direct eye contact when communicating with patient/family." (from the Blue MACS-Mastery and Assessment of Clinical Skills, 1981)

By focusing on the words "attentively" and "direct eye contact" we can begin to develop the means to evaluate achievement of this objective. A fieldwork educator might observe student performance in patient education situations and make special note of body language, eye contact, non-verbal gestures and other attention maintaining behaviors.

To identify the means to evaluate achievement of the objective, we must answer the question, "How will it look, sound or feel if the learner is achieving this objective?"

This question can be answered from the perspective of the student: "What will I see, hear or feel if I am achieving this objective?", or from the perspective of the fieldwork educator: "What will I see, hear or feel if the student is achieving this objective?"

It helps both the student and fieldwork educator to share their answers to these questions.

3. Design learning activities to meet the objectives.

The design of effective learning activities is one of the most challenging tasks for the fieldwork educator. It should be a joint venture, between the student and fieldwork educator. Students are often able to assess their readiness to take on the responsibility inherent in a clinical learning task.

There are three principles to follow in the design of learning activities:

1. Assess student readiness for the required level of responsibility.
2. Select appropriate patients and complexity of tasks required.
3. Identify a progression of student performance in the activity.

Each of these principles is critical for the selection of an appropriate learning activity. Let's try designing some learning activities. Design learning activities for the following objective:

"Demonstrates safe handling of patient care equipment. (eg. Catheters, I.V.'s, oxygen, etc)" (from the Blue MACS-Mastery and Assessment of Clinical Skills, 1981)

First, we must assess student readiness for the required level of responsibility. What does the student know about the purposes of the various pieces of equipment? What background has the student had in the academic program to introduce the indications, contraindications and precautions associated with patient management in the presence of these pieces of equipment? What anxieties does the student have in approaching a patient who must use any of the above?

These are all important questions to ask the student, BEFORE placing the student in a situation where he or she will be expected to deal with the problem successfully.

Second, we must select appropriate patients and complexity of task required. A terribly complex patient with multiple intravenous lines, monitors, oxygen mask and catheters is NOT our best choice for an initial learning experience in how to safely handle equipment. We may want to select a patient with one piece of equipment and review the task in the context of the precautions associated with one piece of equipment. We may not have a choice in the challenges that our patients present as learning experiences. But it is desirable to select the least complicated patient for an initial learning experience.

Third, we must identify a progression of learner performance in the activity. A great fear of all students is that they will be asked to do **too much, too soon, all alone!** We can structure the fieldwork experience to reflect a progression of responsibility. At the first contact with the patient, the fieldwork educator might demonstrate precautions with patient care equipment. Following that experience, the fieldwork educator might ask the student for a description of their understanding of precautions to follow with that equipment. The fieldwork educator might precede the initial learning experience by asking the student to read various protocols or procedure manuals in the clinical setting, or ask the student to review his or her notes from school on the subject.

Subsequent learning experiences might include new patients with the same equipment, in which the student demonstrates his or her safe management of the equipment or progression to more complex patients with several types of equipment, in which the fieldwork educator again goes through the process.

4. Evaluate the effectiveness of the learning experience and revise as necessary.

This evaluation requires the student and fieldwork educator to assess learner performance in achieving the objective. Did the student achieve the objective? If

not, what criteria can you identify that were not achieved? This feedback is essential for student development.

The student and fieldwork educator must determine how effectively the learning experience has provided the student with the knowledge, attitudes or skills to demonstrate achievement of the objective. The learning experience and objective may be mismatched. An example of a mismatch is expecting a learner who is **reading** about a procedure to then demonstrate competence in **performing the physical skill**. Generally, performance of a physical skill can be enhanced by using learning activities that include a progression of instructor demonstration, assisted practice, instructor observation and feedback of student performance and then independent student performance.

The revision of the learning experience might involve adding supplementary learning experiences, including more instructor observation, demonstration, and feedback or identifying materials for learner self-study. This is a negotiated process, where both student and fieldwork educator agree again on the objectives, the means by which experiences in which the student will participate to achieve the objectives.

Activity #3:

Design a site-specific objective for a new Level II OTAS (1-2nd week of fieldwork) from the following broad objectives:

Sample:

1. Student will correctly administer assigned evaluation procedures to obtain information relevant to patient performance. (broad objective)
2. Student will adhere to procedures outlined in manual when administering Paracheck Geriatric Rating Scale to obtain information regarding client's physical condition, general selfcare and social behaviors. (Setting specific)

1. Student will obtain pertinent data from observation.
2. Student will identify and report the need for program change.

The Evaluation Process

To begin our discussion of evaluation of the student, we must first understand the evaluative process from the perspectives of the student, the fieldwork educator, the academic program and the clinical facility. There are three areas on which we will focus our attention in this discussion.

1. The purpose of the evaluation
2. The standards to be used for the evaluation
3. The strategies which are appropriate

1. What is the purpose of the evaluation? What judgements about the student and what decisions rest on the conclusions drawn from the evaluation?

- *What is at stake for the student? Will the student be able to incorporate the feedback received into his/her performance right away? Will the student graduate or advance to another phase of the academic program if he/she receives a favorable evaluation?*
- *What is at stake for the academic program? Will the clinical facility seek to discontinue its relationship with the academic program if the evaluation is unfavorable? Does the evaluation have implications for curriculum design or emphasis?*
- *What is at stake for the fieldwork educator or clinical site? Will the evaluation reflect on the training or qualifications of the fieldwork educator? Will the fieldwork site/program be altered as a result of the evaluation of the experience? Will future decisions be made regarding faculty selection or development?*

In many ways, what we are asking here is whether the decisions based on the evaluation are **formative or summative** in nature. **Formative decisions** are those which will serve to change current performance, to alter a program plan or to facilitate the successful completion of an on-going process. Goals, plans, learning activities and progression to more complex activities are all affected by formative decisions.

In contrast, **summative decisions** reflect an assessment of the "final" status of student performance. A summative decision occurs at the end of the fieldwork experience and differs from the formative decision in that the experience is over and performance cannot be altered. It is a summation of student status or program effectiveness and serves as the final evaluation.

The purpose of the evaluation may influence our choice of strategies and selection of behaviors to evaluate.

2. On what standards is the evaluation of student performance based? What behaviors are or should be observed? What cognitive, attitudinal or decision-making processes underly the observed action?

The standards on which the evaluation of the OTA student's performance are based are developed by our professional association. Communicating expectations for student performance goes hand in hand with identifying standards. It is very difficult to communicate expectations for performance when the standards for that performance are not known, difficult to understand, or too general.

Many health professions use a **competency-based approach** to evaluation. This means that each student is expected to perform a specific set of behaviors or tasks, which represent professional standards for clinical practice. The foundation of a competency-based approach is in mastery learning, where all students are expected to achieve the specified standard. Students are not compared to each other, but rather compared to the standard or competency.

The competency-based approach is far preferable to a norm-based approach, in which students are graded in comparison to the "average" learner. After all, would you want to be treated by someone who showed slightly "below the average", but passing grades in safety or ethics?

Even so, the competency-based approach forces fieldwork educators to focus more on tasks than thinking or decision-making processes. Recent research in clinical decision-making provides evidence that the students' attitudes and thinking processes are often influenced by their behaviors, as well as cognitive processes, beliefs and attitudes influencing behavior. In other words, what happens to the student changes how he/she perceives the situation and how he/she will then act in future situations. It is critical that the evaluative processes somehow tap the thinking, attitudes and decision-making processes of the student.

2. Given what we want to evaluate, what are reasonable ways to perform the evaluation?

As discussed above, fieldwork educators recognize that clinical performance is quite complex. Not only must fieldwork educators focus on observable behaviors, they must also make some assessment of the decision-making processes and attitudes underlying those behaviors.

Direct observation of student behaviors and subsequent rating of those behaviors does not always provide the fieldwork educator with the data needed to make critical decisions about student competence in clinical decision-making. Even though this method remains the most widely used approach, it has not been shown to provide reliable information on which to base **summative decisions**.

Instead, direct observation seems to have its greatest value in providing information for **formative decisions**.

Direct observation has not been demonstrated to be a conclusive or terribly reliable form of evaluation. It is rarely carried out in a methodical way and the factors to which the fieldwork educator pays closest attention may vary in their importance to the outcome. For instance, the fieldwork educator may be very concerned with the student's technique and lose sight of the result: an acceptable outcome, despite the difference in technique. In addition, the content of what is observed during direct observation is largely dependent on real-life needs of the patient/client. Although students cannot be penalized for the experiences which they did not have, (because their patients did not have the need for a particular treatment or technique,) the fieldwork educator is left with some important questions left unanswered.

Let's instead consider some alternatives to direct observation as a source of evaluative information.

"What information would you be able to gather from each of the following?"

1. Reviewing written documentation by students using a utilization-review type of process.
2. Written patient management problems.
3. Demonstration on simulated patients with specified problems.
4. Discussion of ethical dilemmas facing the practitioner.
5. Role playing difficult interprofessional and/or patient care situations.
6. Special projects, such as case studies or developing programs.
7. Student journal/diary of fieldwork experiences using self-assessment.
8. Student impression/evaluation of selected fieldwork experiences.
9. Discussion of decision-making process/rationale for treatment goals and plans.
10. In-basket simulations to demonstrate case load organization, scheduling and time management priorities.

All of the above methods provide different tools and strategies by which the fieldwork educator can develop a more thorough picture of student abilities. You will note that many of these evaluative tools could easily be tied into learning experiences.

Evaluation goes hand in hand with continued development and learning. It is most helpful to the learner to use formative evaluation in conjunction with planning new learning experiences.

Consider how you might incorporate any of the following as formative or summative evaluation tools in your clinical education program:

1. Reviewing written documentation by learners using a utilization-review or peer-review type of process.

This method allows the fieldwork educator to evaluate the student's written patient care records using institutional standards for documentation. Such standards provide an objective means of evaluation with opportunities to simultaneously evaluate the learner's ability to extract information from the patient's history and records, organize their documentation and plan appropriate intervention.

2. Written patient management problems

Critical decisions are often made in the first few minutes of patient contact. Written patient management problems allow the fieldwork educator the ability to present various forms of information to the student, while evaluating the student's decision-making process and ability to use this information appropriately. The student's ability to understand and prioritize the information presented in the patient's history, objective findings and test results and integrate this information into a whole can be more controlled in a written simulation.

3. Demonstration on simulated patients with specified problems

The student may not have the opportunity to actually practice a number of different evaluative and/or treatment procedures, due to the time of the learning experience. Simulations, using a staff member or volunteer as a patient, allow the student the opportunity to practice these specified skills. Even though it is a simulation, this gives the fieldwork educator a chance to evaluate learner abilities to interview, obtain a history or demonstrate specific skills and techniques.

3. Discussion of ethical dilemmas facing the practitioner

Difficult situations that arise may be prime opportunities for the fieldwork educator to evaluate students' attitudes and values. By discussing the student's actions and decisions, the fieldwork educator is able to gain insight into the student's decision-making processes.

4. Role playing difficult interprofessional and/or patient care situations.

The fieldwork educator may not be able to observe the students communicating with other professionals or patients in difficult situations. Yet, our interpersonal skills in situations of stress are constantly called into play in today's clinical environment. Role playing some difficult situations may give the fieldwork educator a chance to both evaluate and assist the student to demonstrate effective communication skills for these difficult situations.

5. Special projects, such as written patient case studies or program development projects.

The ability to research and organize material from many sources is an important skill. The fieldwork educator can use projects to assess student abilities to use available resources effectively to gather information and demonstrate professional writing skills.

6. Learner journal/diary of clinical experiences.

As a written record, a student diary of fieldwork experiences can provide a running log detailing both the nature and volume of learning experiences in which the student has been involved. In addition, if the student is encouraged to write impressions, problems, reflections etc., the diary can chronicle student development as well. In this way, it provides a record of what has happened, what the student thought about it and what was learned as a result. Fieldwork educators might also use the same format to comment on the student's experiences.

7. Student self-evaluation of selected clinical education experiences.

As a more formal self-evaluative tool, it may be helpful for both the student and fieldwork educator to critique the student's performance in a given activity. A comparison of the student's and fieldwork educator's perceptions of students' strengths, weaknesses and proposed recommendations for future performance will reveal agreement and/or discrepancies in perspectives and impressions. This can be very helpful in assisting the student to define priorities and tailor future performance accordingly.

8. Discussion of decision-making process/rationale for treatment goals and plans.

Students are often faced with a number of different treatment goals and options from which to choose. Choices are often made based on what is consistent with organizational philosophy, past experience and level of comfort with various skills. A discussion about what the student considered when making various

decisions will reveal the student's rationale for these choices. Incorrect impressions can be rectified following a discussion of this type.

9. In-basket simulations to demonstrate case load organization, scheduling and time management priorities.

A favored technique for evaluating managerial capabilities, the in-basket simulation gives the student a chance to demonstrate his/her skill with delegating, prioritizing and managing the multiple demands for the time of the practicing clinician. A number of simulated referrals, requests and phone messages might be given to the student who is then asked to make decisions regarding the best way to manage their time and handle each situation. This provides for a fairly realistic evaluation of student ability to manage multiple priorities.

The above evaluative tools are creative and innovative ways to demonstrate student abilities that are often not tapped in the course of "usual" observations of student performance in the fieldwork setting.

Observation of performance by itself does NOT allow for a thorough evaluation of student development of attitudes or decision-making processes. We MUST incorporate other means to evaluate these very important areas.

Errors Commonly Made When Using Rating Scales

Compiled by Maralynne D. Mitcham, PhD, OTR/L, FAOTA

The error of leniency

There is a tendency for raters to rate those whom they know well or like better higher than they probably should and this is probably the most common of the errors. Sometimes when raters are aware of this problem they attempt to compensate for it by rating lower than they probably should. This tendency is termed negative leniency. Leniency errors will decrease the discrimination power of the rating scale.

The error of central tendency

There is a tendency for raters to avoid the extremes or terminal categories of a rating scale and displace their ratings towards the midpoint of a scale. This, again, decreases the discrimination power of the scale.

The halo effect

There is a tendency to assign ratings in the direction of an overall impression of the individual. The more favorable the general impressions of the individual are

the more favorable the ratings tend to be. Such an effect is more prevalent when a behavior or performance:

- a. Is not easily observable
- b. Is not frequently singled out or discussed
- c. Is not clearly defined
- d. Involves reactions with other people
- e. Has high moral importance (Guildford, 1995, p. 279)

Halo effects will decrease the impact of intra-individual differences.

The logical error

This is similar to the halo effect and involves raters giving similar ratings to behaviors that appear to be logically related.

The contrast error

This is a tendency for raters to rate others in the opposite direction from the way they perceived themselves on that particular behavior or skill.

The proximity error

There is a tendency to rate adjacent behaviors in similar fashion especially if they are closely related. Sometimes this can be avoided if the behaviors are spaced further apart on the rating scale or if they are rated individually on separate occasions.

Implications for rater training

With this information in hand, it is important that, in order to minimize such biases and error, raters should be carefully trained in the use of the rating scale. Once raters are familiar with these errors, it is easier for them to counteract them. It is often helpful if group discussion can be utilized as a way of dealing with problems that are associated with the reality of accurately measuring and evaluating an individual's performance through use of a rating scale. Those who are responsible for using rating scales need to have sufficient contact with the ratee, be willing to provide information without distortion and be honest and accurate with their ratings.

Grading procedure

Performance factors	Far exceeds requirements (A)	Exceeds Requirements (B)	Meets Requirements (C)	Needs some Improvement (D)	Does not meet Minimum Requirements (E)
QUALITY	Leaps tall buildings with a single bound	Must take running start to leap over tall building	Can only leap over a short building or medium with no spires	Crashes into buildings when attempting to jump over them	Cannot recognize buildings at all, let alone jump
TIMELINESS	Is faster than a speeding bullet	Is as fast as a speeding bullet	Not quite as fast as a speeding bullet	Would you believe a slow bullet?	Wounds self with bullets when attempting to shoot a gun
INITIATIVE	Is stronger than a locomotive	Is stronger than a bull elephant	Is stronger than a bull	Shoots the bull	Smells like a bull
ADAPTABILITY	Walks on water consistently	Walks on water in emergencies	Washes with water	Drinks water	Passes water in emergencies
COMMUNICATION	Talks with God	Talks with the faculty	Talks to himself	Argues with himself	Loses those arguments

Answers for Activities

#1-

- Early stage student different from end stage student
- Student near end should be entry level-more independent, increased problem solving, assume more complex responsibilities, more sophisticated.
- Student must simultaneously develop skills in various clinical tasks and procedures, demonstrate effective written and verbal communication and time management as well as exhibit professional behaviors.

#2-

References/Resources

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