Clinical Practicum Evaluations:

Getting Bench Preceptor “Buy-In” for Thoughtfully Completing Evaluations

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Objectives:

Following this presentation the participants will be able to:

- Classify tools that can be used to measure and evaluate student performance in the clinical laboratory.
- Identify common errors associated with practicum evaluations.
- Identify strategies to educate clinical preceptors on thoughtful completion of student evaluations.

NAACLS Standards

Evaluation systems must be related to the objectives and competencies described in the curriculum for both didactic and applied components. They must be employed frequently enough to provide students and faculty with timely indications of the students’ academic standing and progress and to serve as a reliable indicator of the effectiveness of instruction and course design.
Assessing Student Progress

Written Examinations

Competency Checklists

Practicum Evaluations

Evaluating Clinical Practicum Performance

• Written examinations, quizzes, and unknowns assess a student’s knowledge - the cognitive objectives and competencies of the curriculum
• Competency checklists assess both cognitive and psychomotor objectives and competencies of the curriculum
• Practicum evaluations can assess all learning domains (cognitive, psychomotor and affective) or focus specifically on Professional Affective Objectives of the curriculum
• The focus of clinical rotation evaluations is assessing a student’s performance in the working clinical laboratory or demonstration of standard outcomes for knowledge, skills and abilities (KSA’s)

Checklist Evaluations

• Checklists are useful for evaluating competency or competency components
• Allows students to track what they have or have not completed during a clinical rotation
• Allows bench preceptors to track student progression in a rotation
• Use the following scale to rate performance on each trait:

<table>
<thead>
<tr>
<th>Trait</th>
<th>4 – Outstanding</th>
<th>3 – Very good</th>
<th>2 – Satisfactory</th>
<th>1 – Below average</th>
<th>0 – Unacceptable</th>
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<tbody>
<tr>
<td>Fol</td>
<td>Always follows procedures and protocols for equipment \ using and \ maintenance \ set up and use \proper \ write \ and \ verbal \ instructions</td>
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Evaluation Tools – Rating Scales

• Direct Observation using Rating Scales
  • Advantages:
    - Allows for evaluation of affective domain
    - Form can be constructed and completed quickly and easily
    - Scoring using numeric ratings can easily translate to numerical grade
    - Tools with word descriptors defining traits can be more objective
  • Disadvantages:
    - Errors associated with rating scales are well documented
    - Rater/Instructor behavior
    - Wears - “Robin” and “Dave”
    - Content validity & tool reliability

Numeric rating vs Defined traits

Use the following scale to rate performance on each trait:

Outstanding, 3 – Very good, 2 – Satisfactory, 1 – Below average, 0 – Unacceptable
Global Rating of Performance pre-2010

- Tool used 20+ years (~1993-2014):
  - Rater judges general categories of ability instead of specific tasks
  - Ratings are completed retrospectively based on general impressions collected over a period of time
  - Derived from multiple sources of information
  - Contains scales that the evaluator uses to judge knowledge, skills, and behaviors
  - Ratings are completed retrospectively based on general impressions collected over a period of time
  - Derived from multiple sources of information
  - Contains scales that the evaluator uses to judge knowledge, skills, and behaviors
  - Combination of numeric scale with some description of traits

Assessment Project – Evaluating the Tool

- Presenter enrolled in Master’s course on Evaluation and Assessment in summer 2010
- Used the tool “Practicum Evaluation – Clinical” to perform project for the course, this including performing a number of tasks:
  - Measurement critique
  - Crosschecking alignment of the tool with objectives, behaviors or outcomes being assessed
  - Assessing the performance standards for the tool
  - Validation Plan
- Outcome of project:
  - Many! – Too many to discuss here
  - In 2010, faculty in-service continuing education program, “Clinical Instruction and Evaluation,” developed – large focus on improving rater-based reliability of evaluation tool

Clinical Instruction and Evaluation In-Service

- In-service objectives:
  - Discuss how student performance in the clinical laboratory can be measured and evaluated
  - List the common errors associated with rating scales
  - Discuss the importance of clinical teaching in the education of a Medical Laboratory Scientist
  - Describe effective methods of teaching laboratory skills
- Designed as one hour presentation with 10 question quiz at the end
- Program Director, management and supervisory group mandated all clinical preceptors complete the course

Errors associated with rating scales:

- Error of leniency
- Error of central tendency
- Halo effect
- Contrast error
- Proximity error

Pre-CE Evaluation Observations

- Not uncommon for students to get a perfect 100% on a rotation’s evaluation
- Evaluations made few comments (positive or negative) to support their ratings
- Practicum evaluations are part of what is used to make hiring decisions for interns who apply for positions
- Management received criticism from staff regarding some graduate hiring decisions after the fact

Changing Demographics

- Years of Experience
  - <5 Years
  - 5-10 Years
  - 10-15 Years
  - 15-20 Years
  - 20-30 Years
  - >30 Years

Graph = Perfect Eval scores by Class

(Practicum with 100% score / total # of evaluations) * 100%
Subsequent CE Refreshers

- Preceptors are annually required to review the errors associated with rating scales
- Added information on how to give feedback – providing appropriate comments to accompany evaluations (2013)
- Substitute ratings with concrete examples
- Reinforce positive behaviors
- Provide constructive criticism for areas a student needs to improve
- Provide advice when indicated
- Education on a new evaluation tool – began use with the class of 2015
- Preceptor “testimonials” – asked preceptors who consistently receive good evaluations from students to describe how they approach bench instruction (2016)

New Evaluation Tool - 2015 to Present

Authentic Assessment

- Comprehensive authentic assessment including a rubric: Clear, performance-based description of what is being rated and what different levels of performance look like
- Scale for evaluator to pick a grade for their overall impression of a student has correlated well with the calculated grade – providing construct validity
References


