Simplifying Rubics to Assess Professional Competence Skills

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Slide Availability

- Slides will be available on the IUPUI Assessment Institute website
- See program for details
- Slides are due by November 15th to IUPUI
- Feel free to email me at k-kier@onu.edu

Learning Objectives

At the end of the presentation, the participant will be able to:

-design a simplified rubric for professional skills assessment

-discuss a competency-based rubric

-discuss the advantages and disadvantages to a simplified rubric format

Introduction

• ACPE accredited college of pharmacy

• 0-6 program

• Private, rural

• College Assessment Committee

• University Assessment Committee

• ACPE accreditation standards changed in 2016

• Curricular revision in 2018-2019 with new P1 start (2019)

Curriculum

- Profession of Pharmacy sequence (1-3 years)
- IPPE
  - Community IPPE (after 2nd year)
  - Institutional IPPE (after 3rd year)
  - Elective IPPE (during 4th year)
    - Interactive patient-professional experiences
- Team-based instruction
- Module-based curriculum
  - Combines pathophysiology, pharmacology, pharmacogenetics, pharmacokinetics, medicinal chemistry, therapeutics
- Capstone course prior to APPE

Assessment Measures

- ExamSoft (years 1-5)
- Assessment Days mapped to ACPE standards, PPCP, and Entrustables
  - Each semester
  - Faculty involvement
  - Rubric-based assessment
- PCOA
  - NABP validated exam
  - Divided into 4 major areas
- Capstone pre-test

Assessment Measures

- NAPLEX board results
  - NABP validated exam
  - Change in format in 2016
  - 92-96% passing since format change
- Course active learning projects data collection
  - Examples: SCHOLAR MAC, Business Plan
- Internship data collected
- Co-curricular implementation in 2018
- APPE rotation rubric/standardized among Ohio schools
- ACPE surveys through AACP national

ACPE Standards

Standard 1: Foundational Knowledge

Biomedical, Pharmaceutical, SAS & Clinical Sciences

Standard 2: Essentials for Practice

Patient-centered care as medication expert, includes health and wellness and population-based care
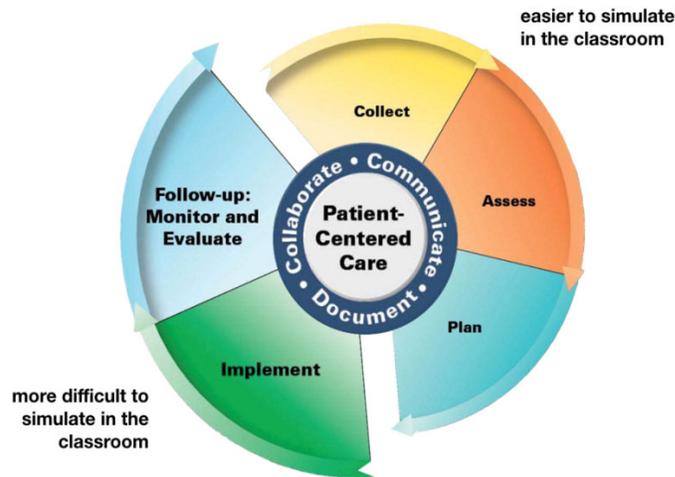
Standard 3: Approach to Practice & Care

Problem solving, patient advocacy, IPE collaboration, cultural sensitivity, communication

Standard 4: Personal & Professional Development

Self-awareness, leadership, professionalism

Pharmacy Patient Care Process

modified image from Joint Commission of Pharmacy
Practitioners' Pharmacists' Patient Care Process

Entrustables

- EPAs are units of professional practice, specific tasks or responsibilities, to be entrusted to the unsupervised execution by a trainee or pharmacist once she or he has sufficient competence.
- EPAs are independently executable, observable, and measurable in both process and outcome.
- Translate competency statements to practice

Entrustables (EPA) Domains

- Patient Care Provider
- InterProfessional Team Member
- Population Health/Care Provider
- Practice Manager
- Information Master
- Self-Developer

Rubric Choices—Multiple Likert Scale

- Potential for better differentiation
- How do you work with a student who scores a 3 versus a 2 versus a 1 on a 5-point Likert scale?
- Faculty reproducibility and training for consistency
- What are we trying to accomplish?
- What do we want to know? How to correct?
- Used validated 5-point Likert scales when we started and faculty found it difficult to distinguish even with training

AAC&U Critical Thinking Rubric

- Student's position (perspective, thesis/hypothesis)—(Capstone)
- Specific position (perspective, thesis/hypothesis) is imaginative, taking into account the complexities of an issue. Limits of position (perspective, thesis/hypothesis) are acknowledged. Others' points of view are synthesized within position (perspective, thesis/hypothesis).
- Specific position (perspective, thesis/hypothesis) takes into account the complexities of an issue. Others' points of view are acknowledged within position (perspective, thesis/hypothesis).
- Specific position (perspective, thesis/hypothesis) acknowledges different sides of an issue.
- Specific position (perspective, thesis/hypothesis) is stated, but is simplistic and obvious--(Benchmark)

Colleague to the Rescue

Engineering Colleague Provided An Option

Work In Progress: Developing Single Point Rubrics for Formative Assessment

John K Estell, Heather Sapp, David Reeping

This Work in Progress describes initial efforts at Ohio Northern University to develop rubrics for assessing student work on a client-based term project in an introductory programming course sequence. Initially, traditional analytic rubrics–where each criterion contains a descriptor for each level in the performance rating scale–were used in a summative fashion to provide feedback. At face value, rubrics of this variety are convenient as they contain qualitative descriptions of the performance criteria used for evaluation, reducing the task of grading to just the stroke of a pen in the appropriate column. Unfortunately, an analytic rubric is usually not designed to communicate precise comments for each dimension, and its summative use disempowers students from applying the received feedback towards improving the project. This all too typical approach toward using rubrics in the classroom can easily have a negative impact. At a minimum, there is a level of incompleteness present that cannot be resolved within the context of the course. Worse, a student being told that they did not perform well on a particular criterion could interpret the message as one of personal failure, leading to possible persistence issues.

Single Point Rubric

How is a single point rubric different?

- The purpose of a single point rubric is both similar to and different from analytic rubrics. Like an analytic rubric, the single point rubric also seeks to clarify expectations, justify grades, make students aware of success criteria, and promote peer review. Unlike an analytic rubric, it focuses exclusively on the level of proficiency expected coupled with personalized feedback.
  - https://theeducatorsroom.com/deep-dive-the-case-for-single-point-rubrics/

Single Point Rubrics

- **Clarity**-Single point rubrics specify specific success criteria without detailing all the ways in which a student can fall short. The reduced volume of text makes it easier for students to focus on mastery and develop a deeper understanding of the expectations.
- **Flexibility**-Because a single point rubric leaves most of the page blank, the teacher has the flexibility to tailor feedback to specific student strengths and weaknesses. In addition, single point rubrics do not narrowly define success in limiting ways, so students are free to find unique and creative ways to reach mastery.
- **Grading**-Single point rubrics align well with standards-based grading, make individualized goals easier, and are feedback focused. The teacher can provide nuanced personalized improvement feedback without compromising on the standard of mastery.
- **Communication**-Teachers can use single point rubrics to facilitate clear and meaningful communication of success criteria with students, administrators, parents, and others. The combination of multiple anchor works and single points rubrics can build a thorough understanding of mastery for students and others.
- **Feedback**-Students are forced to both engage in self-analysis and actively utilize specific teacher and/or peer feedback to improve their work. Feedback is individualized, actionable, and acts as an important aspect of the learning process.
- **Manageability**-Single point rubrics are easier and faster to create because of their simplicity. For ongoing assessment, they are much more manageable to implement than traditional analytical rubrics. Straightforward, simple language makes reading and understanding the single point rubric more manageable for students as well.
- **Progress-oriented**-Unlike traditional grades and rubrics, single point rubrics are rooted in personal progress. Consequently, the ability of students to make comparisons, especially derogatory comparisons, or compete for grades, is greatly reduced.
- **Empowerment**-Single point rubrics empower teachers to honestly and naturally assess student work and provide tailored feedback to each student. They also empower students to take ownership of their learning and judging the quality of their work.
  - https://theeducatorsroom.com/deep-dive-the-case-for-single-point-rubrics/

Assessment Days Mapping --Example

P3 Assessment Day Fall --   OTC case with counseling and selection of product and institutional math dosing.   The student will be required to use the Scholar-MAC approach.

- Students are expected to know doses for medication recommendations
- Community case will assess 1. patient communication (Scholar-MAC) and 2. ability to recommend product to patient (including dose) OR…refer patient to doctor
- Hospital case will assess 1. inter-professional communication and 2. ability to perform hospital specific pharmacy calculation

ACPE Mapping:

1.0 Foundational knowledge

2.1 Patient-centered care

3.6 Communication

4.4 Professionalism

PPCP

- Collect, Assess, Plan

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Simplified Rubric

P3 Assessment Rubric

Student Name_____

COMMUNITY CASE RUBRIC

Competent	Yes	No	Comments
Professionalism: Professional dress, appropriate			
Communication—Interview: questions to patient were open ended/probing questions, allowed patient to answer (good listener), flow with few distractors such as um			
Communication—Nonverbal: body language was appropriate, eye contact was good, no distracting movements			
S-Symptoms—asked patient			
C-Characteristics of symptoms			
H-History of symptoms			
O-Onset of symptoms			
L-Location of symptoms			
A-Aggravating factors			
R-Remitting factors			
M-Medication (Rx, OTC, herbal)			
A-Allergies			
C-Conditions (medical)			
Recommendation: student gave a confident recommendation			
Dose: student gave an appropriate dose if recommended a product; mark NA if they referred for treatment			

Questions Asked at The End

Did they provide a good solution to the problem?   YES   NO

Would you return to this student if they were your pharmacist?   YES   NO

Did the student seem excessively nervous or did they seem uncomfortable? YES   NO

Please indicate a final overall impression of the interaction (check one):
_____*Competent*

_____*The student would benefit from another opportunity to practice a similar case*

Initials of faculty evaluating _____   COMMENTS:

Assessment Days Results --Example

- 15% (21) will need to practice again
  - 2% Professionalism
  - 3% Communication Interview
  - 3.6% Communication Nonverbal

- S—3% missed
- C—7.1% missed
- H—7.1% missed
- O—0.7% missed
- L—5.7% missed
- A—1.42% missed
- R—2.85% missed
- M—1.42% missed
- A—3.57% missed
- C—5.7% missed

Assessment Days Mapping--Example

- Dose—12.9% missed
- Recommendation—9.29% missed
- Solution—17.9% missed
- Return to Pharmacist—7.86% missed
- Nervous—8.57% were nervous

Question

What could be potential issues? What could be improved?

Thoughts/Questions

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