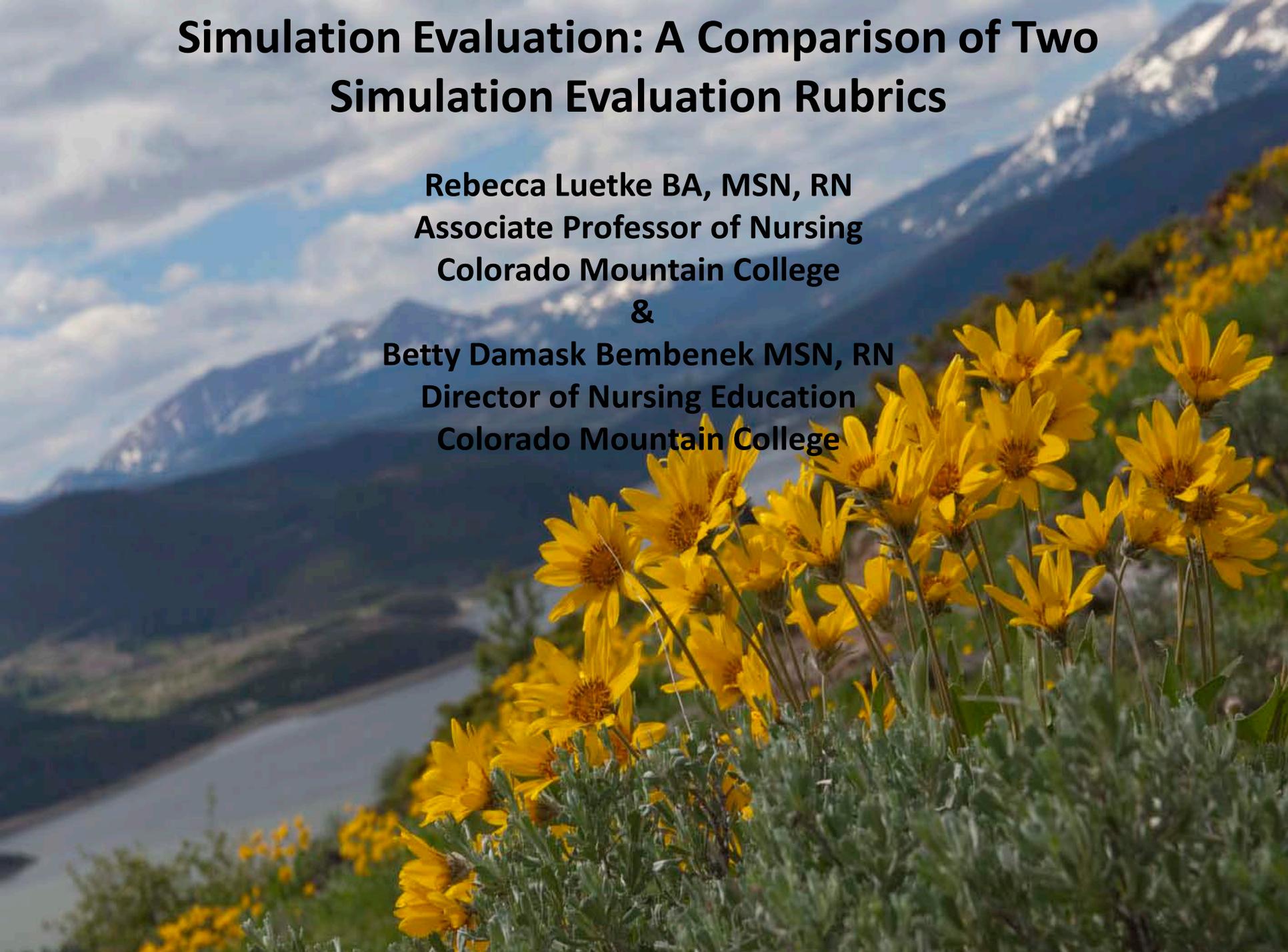


Simulation Evaluation: A Comparison of Two Simulation Evaluation Rubrics

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Simulation is an important aspect of nursing education but how do we effectively evaluate our students during simulations?



One Student's Perspective[?] on Simulation Rubrics

"I think the rubric is a good idea. It let's us know ahead of time just what we will be expected to know and do. It gives the instructors a framework by which to evaluate our work, and helps eliminate some of the subjective components of such evaluations. It also helps (I think) to keep track of us while the sim is running, so the evaluation takes place concurrently with the sim rather than depending on notes and memory afterward."



The use of simulation needs to be meaningful for the students and the use of an evaluation tool is a way to increase meaning and deepen the learning experience for students. Simulation grading rubrics allow faculty to assess students on critical thinking and contextual components of patient care scenarios (Gantt, 2010).



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According to Parker and Myrick (2010)
“Transformative learning theory provides educators with the tools to empower students to challenge their preconceived beliefs, assumptions, and values and socialize them appropriately to thrive in modern day clinical practice.” (p. 326)



Nursing theorist Ernestine Wiedenbach proposed that sound clinical judgment improves with expanded knowledge and increased clarity of purpose (Toomey & Alligood, 2006).



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To provide an improved learning experience within simulation we studied the student perceptions on the use of two simulation evaluation tools within a planned simulation.



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Through a literature review only one evaluation rubric stood out as an appropriate tool, the Sweeney Clark Rubric which is based on Patricia Benner's Novice to Expert Nursing Theory.

Name of "Primary RN" _____ Scenario: _____
Sweeney-Clark's Simulation Performance Rubric Date _____ Course: _____ Faculty _____

Circle One: Self Faculty Peer Circle One: Soph Jr Sr Level: _____ Eval# _____

0 Category	1 NOVICE Doesn't yet see picture	2 Advanced BEGINNER Sees part of the picture	3 COMPETENT Sees the basic picture	4 PROFICIENT Sees the big picture	5 EXPERT Anticipate the changing picture
Patient Assessment N/A <input type="checkbox"/>	Performs assessment with guidance/prompts	Distinguishes between abnormal and normal assessment findings	Recognizes changes in patient condition, intervenes appropriately and reassesses	Classifies relative importance of multiple assessment findings over time	Relates ongoing findings to potential complications ;modifies plan & nursing interventions
History Gathering N/A <input type="checkbox"/>	Recalls questions for basic history data with guidance/prompts	Discriminates between normal and abnormal history data	Uses understanding of disease process to focus questioning	Includes past medical history to develop comparison with current condition	Anticipates potential outcomes based on history findings
Patient Teaching N/A <input type="checkbox"/>	Seeks guidance to answer patient/family questions	Explains procedures to the patient/family	Rephrases medical information into lay terms for patient/family	Modifies patient teaching based on patient/family response & learning barriers	Identifies need and resources for further patient/ family teaching; initiates multidisciplinary involvement
Lab Data & Diagnostics N/A <input type="checkbox"/>	Reports lab data	Distinguishes between normal and abnormal lab data/diagnostic studies	Uses understanding of lab values/studies to plan care	Analyzes trends in lab values; compares with patient response	Monitors patient response via analysis of lab data and exam; assists with plan for future testing
Nursing Interventions N/A <input type="checkbox"/>	Performs simple, basic nursing care with prompts	Identifies active patient problem(s), but needs help in selecting intervention(s)	Implements appropriate routine nursing intervention(s) and evaluates effect; may delegate	Implements appropriate nursing intervention plan in timely manner; consistently delegates	Modifies nursing care by synthesizing evidence –based knowledge into practice; utilizes and/or conducts research
Clinical Judgment N/A <input type="checkbox"/>	Recalls norms in patient condition	Recognizes variations in patient condition, but needs help prioritizing; may access resources	Determines priorities in patient care based on varying patient condition; accesses appropriate resources	Carries out care while managing multiple contingencies in concert with health care team members	Devises plan to avoid complications; acts as resource when patient complications occur
Communication N/A <input type="checkbox"/>	Repeats basic information with prompting for documentation and/or report to physician & colleagues	Summarizes available information for documentation and discussion with colleagues &/or physician; may use standardized approach	Prioritizes available information for documentation and discussion with colleagues &/or physician; uses standardized form for handoff/report	Draws conclusions based on available information for documentation and discussion with colleagues &/or physician; uses standardized form for handoff/report	Synthesizes available information and possible patient outcomes for documentation and discussion with colleagues &/or physician; uses standardized form for handoff/report
Safety N/A <input type="checkbox"/>	Identifies patient with prompts; sanitizes hands with prompts	Identifies patient with single identifier; hand sanitation majority of times; may recognize unsafe equipment or situation	Identifies with 2 identifiers; sanitizes hands; employs universal precautions, recognizes unsafe equipment or situation and corrects	Uses ≥ 2 identifiers & actively incorporates patient, environment and procedural safety standards of care	Synthesizes patient safety assessment and standard of care to devise multidisciplinary plan for optimal patient safety and health care team member protection

Areas for improvement: _____

Strengths: _____



As nursing educators we are preparing students for clinical practice using QSEN as a guide and resource.

A simulation rubric based in QSEN allows for students to transition to safe quality clinical practice as professional nurses.



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With no other appropriate rubric found the authors created the QSEN Simulation Evaluation Rubric based on the QSEN skills competencies.

QSEN Based Simulation Evaluation Rubric NUR 172

Each of the competency areas has expected skills which will be demonstrated during the simulation. Each of the bullet points within the expected skills of each competency are worth 5 points. Please see the following grading criteria to understand how you will be scored in the simulation. To pass the simulation you need to receive a minimum of 77% on the rubric. Students who do not receive 77% will need to repeat the simulation until they meet 77%. Students who receive between 77% and 85% will need to write out a self study action plan on how they will learn the skills needed within the simulation.

5 Points=All aspects of the expected skill was met with no prompting or input from the faculty

4 Points= The majority (75% or greater) of the expected skill was met with no prompting or input from the faculty.

3 Points=Over 50% of the expected skill was met with no prompting or the skill was met with minimal (1 or less) prompting from the faculty.

2 Points=Less than 50% of the expected skill was met with no prompting or the skill was met with multiple (2-3) prompts from the faculty.

1 Point=The expected skill was only met with multiple (2 or more) prompts from the faculty

0 Point=The expected skill was not met with multiple (2 or more) prompts from the faculty

Competency Area	Expected Skill	Example	Points
Patient Centered Care	<ul style="list-style-type: none"> • Provide family and patient-centered care with sensitivity and respect for the diversity of human experience (Course Outcome 1, 5) • Assess presence and extent of pain and suffering. (Course Outcome 1) • Initiate effective treatments to relieve pain and suffering in light of patient values, preferences and expressed needs. (Course Outcome 1, 5) • Communicate care provided and needed at each transition in care (Course Outcome 4) 		___/20
Teamwork and Collaboration	<ul style="list-style-type: none"> • Function competently within own scope of practice as a member of the healthcare team (Course Outcome 1, 5) • Assume role of team member or leader based on the situation (Course Outcome 2, 5) • Communicate with team members, adapting own style of communicating to needs of the team and situation (Course Outcome 4, 5) 		___/15
Evidence Based Practice	<ul style="list-style-type: none"> • Base individualized care plan on patient values, clinical expertise and evidence (Course Outcome 1, 3) • Consult with clinical experts before deciding to deviate from evidence-based protocols (Course Outcome 3) 		___/10
Quality Improvement	<ul style="list-style-type: none"> • Seek information about outcomes of care for populations served in care setting (Course Outcome 4) 		___/5
Safety	<ul style="list-style-type: none"> • Communicate observations or concerns related to hazards and errors to patients, families and the health care team (Course Outcome 3, 4) • Use national patient safety resources for own professional development and to focus attention on safety in care settings (Course Outcome 3, 		___/10
Informatics	<ul style="list-style-type: none"> • Apply technology and information management tools to support safe processes of care (Course Outcome 1, 3, 6) • Document and plan patient care in electronic health record (Course Outcome 4, 6) 		___/10
Professionalism	<ul style="list-style-type: none"> • At all times student was professional in the simulation setting with appropriate dress, communication and behavior. • Student was prepared and had a strong basic knowledge of simulation topic 		___/10



For each simulation the QSEN rubric has a faculty copy with details. The benefits of the faculty copy include:

- All simulations are consistent
- Instructors of all clinical backgrounds can run any simulation
- Students all have the same expectations
- Details, such as quality improvement can be incorporated into simulations

Competency Area	Expected Skill	Example
Patient Centered Care	<ul style="list-style-type: none"> • Provide family and patient-centered care with sensitivity and respect for the diversity of human experience (Course Outcome 1, 5) • Assess presence and extent of pain and suffering. (Course Outcome 1) • Initiate effective treatments to relieve pain and suffering in light of patient values, preferences and expressed needs. (Course Outcome 1, 5) • Communicate care provided and needed at each transition in care (Course Outcome 4) 	<ul style="list-style-type: none"> • Responded with appropriate language level to mother with a low health literacy level • Assesses child's level of pain in office • Questions child's level of pain with teething • Offers interventions ideas to make teething less painful • Communicates with mother regarding the need to change her practice of giving her infant honey and a bottle in the crib related to health promotion
Teamwork and Collaboration	<ul style="list-style-type: none"> • Function competently within own scope of practice as a member of the healthcare team (Course Outcome 1, 5) • Assume role of team member or leader based on the situation (Course Outcome 2, 5) • Communicate with team members, adapting own style of communicating to needs of the team and situation (Course Outcome 4, 5) 	<ul style="list-style-type: none"> • Nurse asks for help in teaching the mother about otitis media and teething issue • The nurse acts as a team leader in meeting all of the patients needs • The nurse communicates professionally and respectfully with all members of the care team
Evidence Based Practice	<ul style="list-style-type: none"> • Base individualized care plan on patient values, clinical expertise and evidence (Course Outcome 1, 3) • Consult with clinical experts before deciding to deviate from evidence-based protocols (Course Outcome 3) 	<ul style="list-style-type: none"> • Nurse incorporates mother's low health literacy into care plan • Nurse consults with physicians regarding findings from physical exam of child

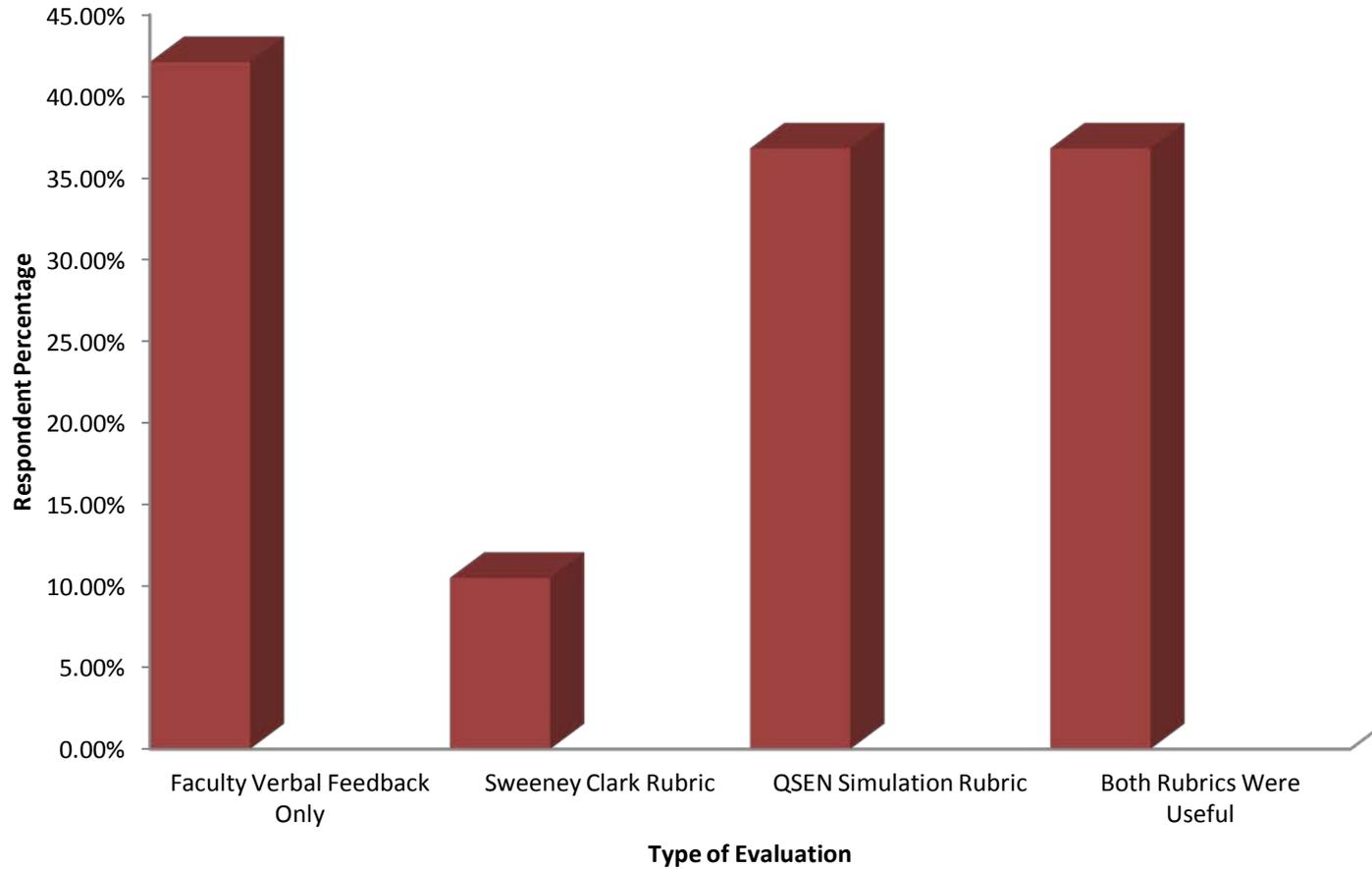
<p>Quality Improvement</p>	<ul style="list-style-type: none"> • Seek information about outcomes of care for populations served in care setting (Course Outcome 4) 	<ul style="list-style-type: none"> • Sees the gap in the clinic charting for discussing the use of honey with infants and discussing of proper bottle angle to prevent otitis media
<p>Safety</p>	<ul style="list-style-type: none"> • Communicate observations or concerns related to hazards and errors to patients, families and the health care team (Course Outcome 3, 4) • Use national patient safety resources for own professional development and to focus attention on safety in care settings (Course Outcome 3) 	<ul style="list-style-type: none"> • Aware of clinic charting issues and need for improvements • Followed all of the NPSG including patient double check for medication administration when appropriate
<p>Informatics</p>	<ul style="list-style-type: none"> • Apply technology and information management tools to support safe processes of care (Course Outcome 1, 3, 6) • Document and plan patient care in electronic health record (Course Outcome 4, 6) 	<ul style="list-style-type: none"> • Uses otoscope correctly • Charts all patient care in Nurse Squared
<p>Professionalism</p>	<ul style="list-style-type: none"> • At all times student was professional in the simulation setting with appropriate dress, communication and behavior. • Student was prepared and had a strong basic knowledge of simulation topic 	<ul style="list-style-type: none"> • Student was in uniform, was appropriate at all times in simulation and treated simulation patient as a real patient • Student was able to provide expected care and had a good understanding of the diagnosis



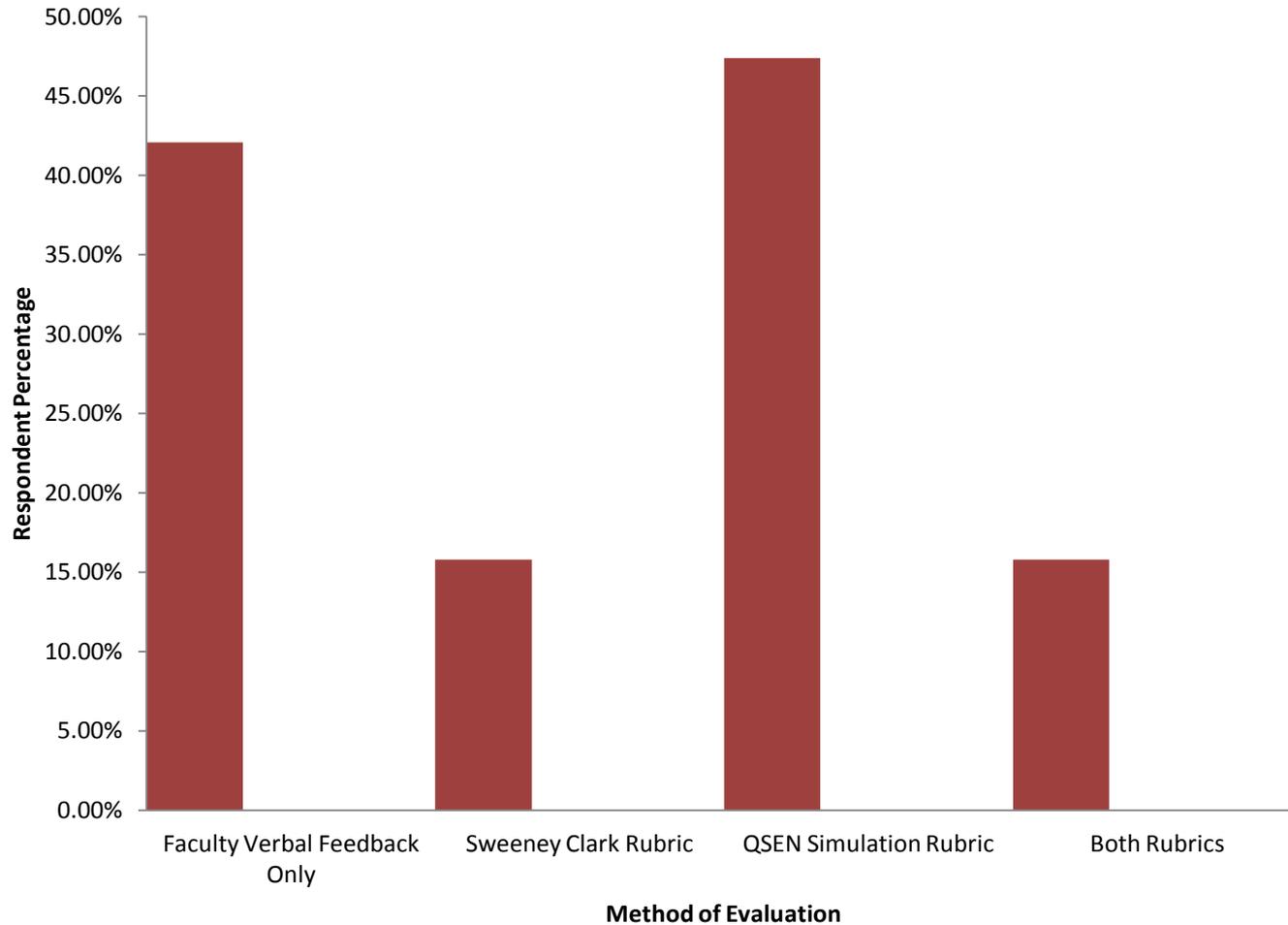
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One class (n=19) of first year students completed the same two high fidelity simulation scenarios and were evaluated as a group on their performance in each scenario. The students were evaluated with the Sweeney Clark rubric in the first scenario, the QSEN Rubric in the second scenario and with verbal feedback in both scenarios. The students completed a post simulation questionnaire based on their experience with the simulation evaluation.

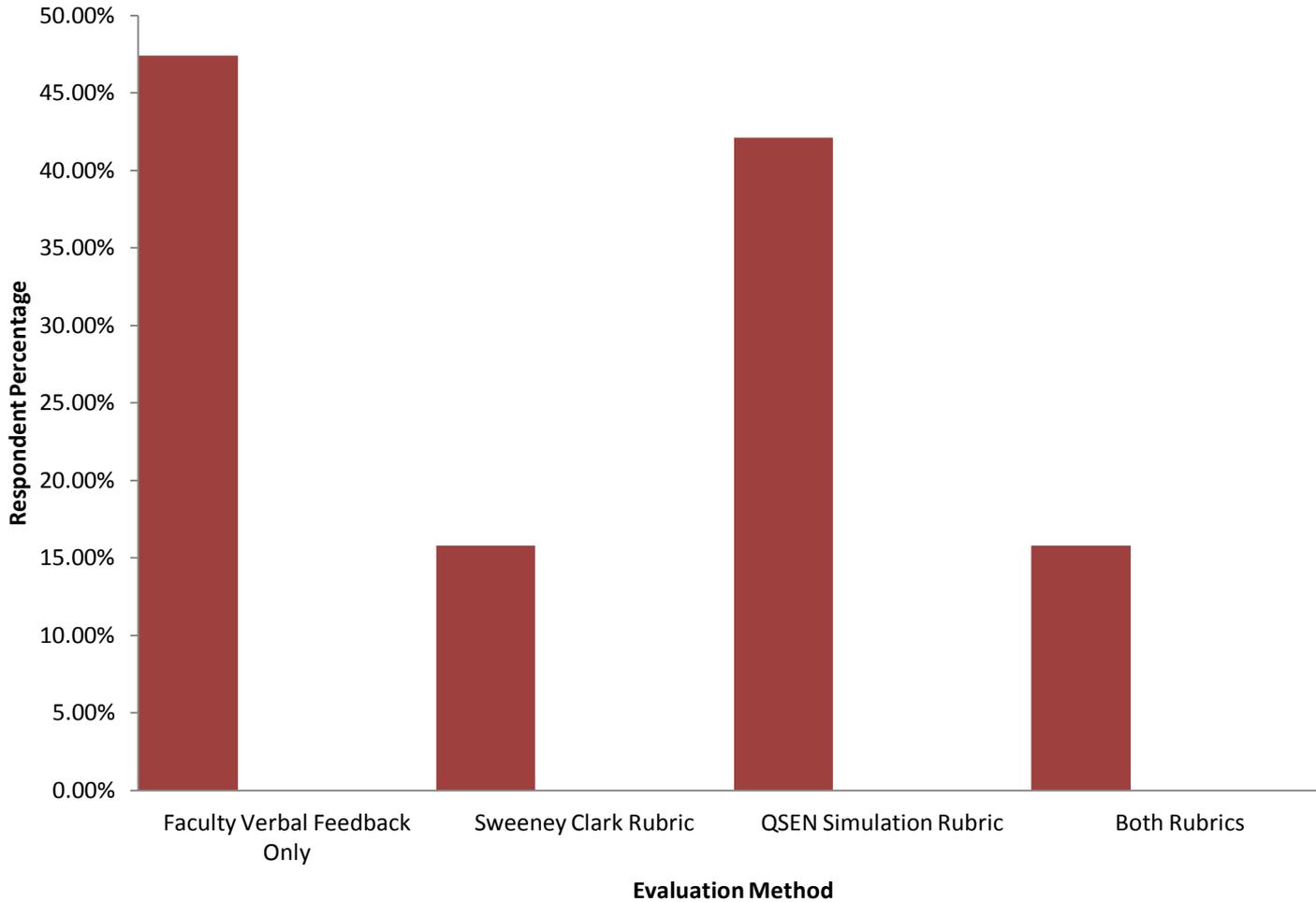
Which type of simulation evaluation tool have you found most useful for your learning experience?



Which type of evaluation tool did you find the most realistic for a simulated patient care experience?



From your experience with simulation learning, which evaluation tool fostered your spirit of inquiry for learning and self reflection?





What We Found

- Students within the study group have a strong need for an evaluation rubric to be used as part of simulations to provide for structured feedback and to be used as a guide for expected learning outcomes.
- The results also demonstrate that debriefing and verbal feedback are essential components to students learning experiences in a post simulation discussion session.
- Students stated that self evaluation using the Sweeney Clark rubric was challenging and adversely impacted their perceived nursing self confidence
- In the Sweeney Clark rubric all faculty using the rubric need to have a consensus of what behaviors define each level in order to appropriately evaluate students.
- The benefit of the QSEN rubric is that it provides additional areas of teaching outside of standard simulations including the ability to add evidence of a quality improvement project and cultural assessment.
- The QSEN rubric allows for faculty consensus and consistency in expected simulation learning outcomes



Future Implications

- More research is needed to validate the QSEN evaluation rubric
- More research is needed into what students need in order to feel successful in simulation experiences
- Nursing educators need to work to ensure simulation evaluation tools have standards equivalent to clinical evaluation tools if simulation is considered part of the clinical experience
- Nursing educators need to create simulation and clinical experiences which foster nursing students transition into professional practice allowing them to meet the expectations of healthcare delivery system



Student Comments

“I think the QSEN rubric with faculty feedback was the best learning experience”

“I don't like the Sweeney Clark Rubric because it is too wordy “

“The Sweeney Clark makes me nuts, I dislike that at the end of going through the category we are asked to grade ourselves”

“Rubrics make our expectations clear. I like being able to review them before a simulation.”

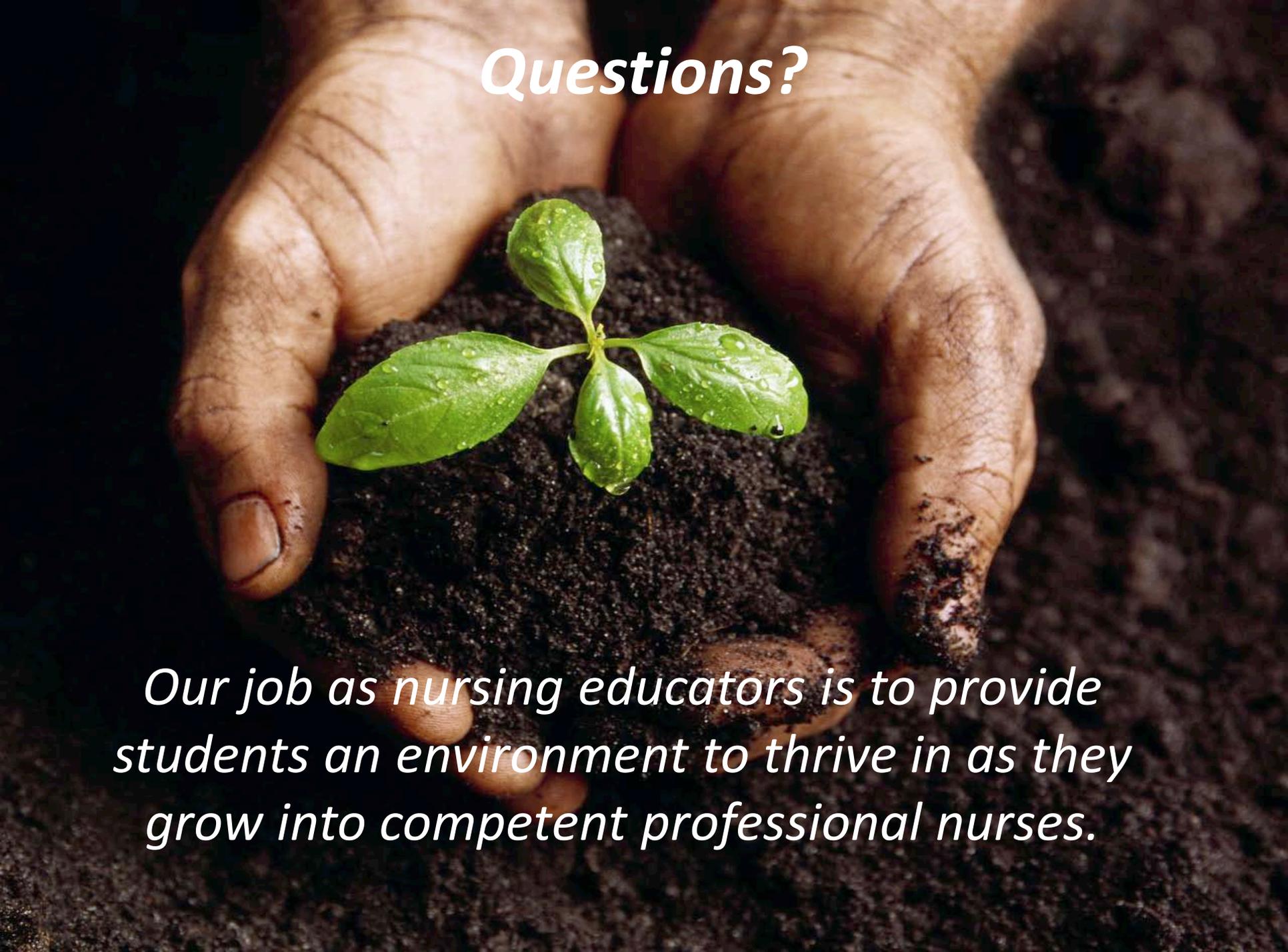
“I understood more what they were looking for out of me in this simulation”



Student Comment

“Rubrics are helpful because they objectify what could be a subjective score & the students can see specific areas that they need to work on. More than that, though, they are helpful before the simulation to know what is expected of you”

Questions?

A close-up photograph of a pair of weathered, brown hands cupping a small, vibrant green seedling with four leaves. The seedling is growing out of a mound of dark, rich soil. The background is a blurred expanse of the same soil, creating a sense of depth and focus on the hands and the young plant. The lighting is soft, highlighting the texture of the skin and the freshness of the leaves.

Our job as nursing educators is to provide students an environment to thrive in as they grow into competent professional nurses.



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