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Author(s)	Xi Vivien Wu, Mary Anne Heng and Wenru Wang
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# **NURSING STUDENTS' EXPERIENCES WITH THE USE OF AN AUTHENTIC ASSESSMENT RUBRIC AND A CASE APPROACH IN CLINICAL LABORATORIES**

## **ABSTRACT**

*Background:* One current challenge for nurse educators is to examine effective nursing assessment tools which integrate nursing knowledge into practice. Authentic assessment allows nursing students to apply knowledge to real-life experiences. Contextualized cases have engaged students for preparation of diverse clinical situations and develop critical thinking skills.

*Aim:* This study aimed to explore nursing students' experiences and learning outcomes with the use of an authentic assessment rubric and a case approach.

*Methods:* An exploratory qualitative approach using focus-group discussions and an open-ended survey was adopted. Sixteen nursing students participated in three focus-group discussions and 39 nursing students completed an open-ended survey.

*Results:* Nursing students noted that an authentic assessment rubric with a case approach provided clarity for their learning goals; built confidence; developed knowledge, skill competencies and critical thinking skills; increased awareness of caring attributes and communication skills; and enriched and extended learning through self-, peer- and teacher-assessments.

*Conclusions:* These findings provide rich insights for nurse educators and curriculum developers in the use of an authentic assessment rubric and a case approach in nursing education.

## **KEYWORDS**

authentic assessment rubric; nursing education; case approach; critical thinking; self-assessment; peer-assessment; teacher-assessment

## **INTRODUCTION**

Assessment in nursing education is the reflection of the quality and quantity of learning and is concerned with students' progress and achievement standards (Löfmark and Thorell-Ekstrand, 2014). The challenge for nursing educators is how to apply assessments effectively in assisting students with integration of theoretical knowledge and professional practice.

Traditional assessments are pen-and-paper tests, and they are commonly used to assess knowledge attainment, place students in different programmes and diagnose potential learning problems. Research, however, has shown that traditional assessments do not provide clear indicators of students' problem-solving, reasoning and critical thinking skills, or recognize their work habits, ability to cooperate and sense of responsibility (Vanaki and Memarian, 2009). Authentic assessment is designed to ascertain students' ability to apply the knowledge to real-life experiences (Liu et al., 2007). Authentic assessment allows students to have alternative ways of responding, interpretations and solutions. Furthermore, authentic assessment provides teachers with the opportunity to introduce new instructional methods that favour investigation, exploration and students' creation of knowledge, as well as metacognition and self-reflection (Vanaki and Memarian, 2009).

In Singapore, changing healthcare needs over the years have led to a more highly educated nursing workforce. Currently, nurses are better educated with about 34,500 nurses

having a bachelor's degree (Aronson et al., 2012). A better educated nursing workforce brings about quality patient care because nurses are better able to contribute to and make clinical decisions. To transform nursing education, collaboration among nursing educators and healthcare nursing professionals must work together to enhance nursing students' education. Benner, Sutphen, Leonard and Day (2009a) advocated the use of both formative and summative assessments in laboratories and clinical settings to assess students' ability to solve clinical problems. Contextualized cases also help nursing students prepare for diverse clinical situations and develop critical thinking skills.

## **BACKGROUND**

### **Authentic assessment**

A comprehensive authentic assessment consists of a performance task that may be presented using a case approach and an accompanying rubric. A case presents a real-life learning situation requiring nursing students to apply their knowledge and make decisions to solve problems. A rubric provides students with clarity about their learning goals.

In nursing education, experiential learning plays a critical role, as Nightingale pointed out: "It is as impossible in a book to teach a person in charge of the sick how to manage, as it is to teach her how to nurse. Circumstances must vary with each different case" (Ormrod and Casey, 2004, p.126). Authentic assessment promotes learning and assessment of cognitive, functional, ethical, and personal competence in professional, real-world situations (Elcigil and Yıldırım Sarı, 2007). The shift in focus from teaching to student learning requires contemporary nursing education to identify student-learning outcomes. This will prepare nursing students for

increasingly complex patient care that requires clinical reasoning, decision-making, communication, teamwork and leadership.

### **Use of rubrics**

A rubric is a set of assessment criteria for a piece of work that articulates the gradation of quality for each criterion (Popham, 2005). Rubrics enable evaluation of student performance that more closely replicates the challenges of real life (Dellefield, 2007). Used in conjunction with case studies to provide real-world simulation in nursing education, an authentic assessment rubric increases student self-efficacy and provides a clear means for nursing students to achieve their learning goals (Speers, 2008).

Rubrics help teachers to clarify their expectations and modify their teaching strategies according to students' progress towards learning goals. Students have a clearer idea of what constitutes excellence throughout a piece of work as rubrics provide a clear summary of performance levels across a scoring scale (Andrade, 2009). Self- and peer-assessment using rubrics help students to be more responsible and confident as they learn to take ownership of the learning process (Jokelainen et al., 2013). Hence, a rubric is a powerful motivational tool, especially when teachers provide individualized, constructive critique.

### **Use of cases**

Cases describe complex situations that can be used in learning about professional practice. The case method gives students the opportunity to explore a problem and come up with an acceptable solution (Benner et al., 2009b). Students receive immediate feedback and are better able to inquire more deeply and broadly about diagnosis, treatment and appropriate nursing interventions for the patient. Case discussions stimulate clinical reasoning and decision-making

skills (Cowan et al., 2008). In discussing a case, students embark on an intellectual activity that requires the ability to integrate prior knowledge with new information and think critically about the outcomes and decisions to be made.

### **Critical thinking skills**

In the nursing context, critical thinking is the thought process that underlies effective clinical problem-solving and decision-making (Cowan et al., 2007). Critical thinking provides a focused approach to clinical reasoning, requiring a tolerance of multiple perspectives supported by reason and evidence (Bor et al., 2007). Critical thinking is a significant component in nursing education and is integral to the nursing practice (Naber and Wyatt, 2014), particularly as nurses need to function in today's complex nursing environments and deal with issues such as advanced technology, greater acuity of patients and complex disease processes. Scholars believe that critical thinking is both a process and an outcome that can be nurtured with active learning (Cassidy et al., 2012). Students need to master nursing knowledge, actively practise nursing skills, recognize assumptions and critique arguments.

## **METHODS**

### **Aim**

The aim of this study was to explore nursing students' experiences and learning outcomes with the use of an authentic assessment rubric and a case approach.

## **Design**

An exploratory qualitative approach using a focus group and an open-ended survey was adopted. Focus-group discussions uncovered rich and deep understanding of students' experiences with the use of an authentic assessment rubric and a case approach. An open-ended survey served to triangulate the findings of the focus-group discussions.

## **Participants**

Purposive sampling was used to recruit nursing students in a post-secondary institution in Singapore. The inclusion criteria were:

- first-year nursing students
- enrolled in a nursing science module that focused on both nursing knowledge and skills
- age range from 17 to 35 years old.

## **Authentic assessment rubric and case**

The case and authentic assessment rubric (AA rubric, Table 1) used in this study (Author, 2012) were developed with reference to the Understanding by Design (UbD) framework and Task Design Guidelines (Levett-Jones et al., 2011; Wiggins and McTighe, 2005). Developed in consultation with nursing experts, the AA rubric sought to assess four primary domains important in nursing, namely cognitive, psychomotor, affective and critical thinking skills. These are also known as the habits of mind, hand and heart – the signature pedagogy for nursing education (Shulman, 2011).

The supporting case was developed based on the learning outcomes in the nursing science module for first-year nursing students. A real clinical scenario was created with information about a patient, such as reasons for admission criteria, current signs and symptoms,

past medical history, social situation, and family support system. Students were required to analyze and synthesize available information as well as anticipate possible patient outcomes and complications for documentation and discussion with their peers. Students were required to make appropriate decisions supported by sound clinical reasoning and modify nursing interventions based on the patient's condition. In summary, authentic assessment with the use of a case and rubric helped nursing students develop habits of mind, hand and heart in the critical thinking, cognitive, psychomotor and affective domains so as to respond to a clinical situation and render quality patient care within the expected time frame.

### **Data collection**

This study was conducted over a ten-week academic semester. The theoretical knowledge for the nursing science module was taught through lectures and tutorials. Students subsequently practised nursing skills in the nursing laboratories. The learning objectives and experience – highlighting the use of cases and authentic assessment rubrics – were communicated to the nursing students in the first week of the semester. This helped students to set clear learning goals and obtain a general idea of the assessment criteria.

A real clinical case was presented, which required students to analyze a patient's case history and current condition, and make decisions supported by sound clinical reasoning. One student took on the role of a nurse, and carried out the necessary assessment and interventions. Using the AA rubric, the student did a self-assessment upon completion of the tasks. Peers who were observing served as peer assessors. The presiding lecturer also provided feedback. Students were assessed for the practical aspect of the skill performance at the end of the semester.

Student feedback on the use of the AA rubric in this study was obtained through a survey comprised of ten open-ended questions and three focused group discussions that encouraged students to share their experiences and suggestions in using the AA rubric. Four to six nursing students, with varied academic performance, attended each discussion session. Each focus-group discussion took about an hour and was audio-recorded.

### **Ethical considerations**

The study was approved by the Head and academic committee of the nursing department in the post-secondary institution. Students were informed of the objectives and process of the research study, and were assured of anonymity and confidentiality. Participation remained voluntary and consent was obtained from the participants.

### **Data analysis**

Audio-recordings of focus-group discussions were transcribed verbatim, and the researcher made notes of the main issues discussed. The thematic analysis method was used to analyze the findings. Rudimentary coding schemes were developed and continuously revised. Patterns in the data were systematically identified as categories, and these categories were organized into themes based on similarities of meaning. Member checking was engaged to provide the opportunity for participants to assess the adequacy of data and validate findings. The researchers analyzed the results of the open-ended survey. Frequency of occurrence for categories in the survey responses was computed to capture the number of nursing students with similar views.

## **FINDINGS**

A total of 16 (12 female and four male) first-year nursing students participated in three focus groups. Participants' ages ranged from 17 to 23 years (mean = 18.5). Thirty-nine students' (26 female and 13 male), with ages ranging from 17 to 30 years (mean = 18.9) participated in the open-ended survey.

Four major themes and relevant sub-themes were generated from data analysis and presented in Table 2. The first two themes reflected nursing students' experiences with the use of an authentic assessment rubric and a case approach, while the last two themes reflected the learning outcomes.

### **Clarity about specific learning goals and development of learners' confidence**

#### *Rubric provides guides and directions*

The participants in this study shared that the AA rubric provided clear direction in terms of specific learning goals. Some participants noted that the use of the AA rubric in the learning task provided an effective and structured learning approach.

We use rubric as a reference, it give us a clear guide of what we want to achieve. (Stud R)

With the rubric, you actually know what you are aiming for. Like what is the purpose of doing this, and what is the main point. (Stud SY)

One-third of the survey respondents indicated that they were better able to understand how assessment in the nursing science module is carried out. More than half the respondents shared that they set their learning goals based on the "exemplary" criterion in the AA rubric, and they put in consistent effort to work towards achieving their goals.

#### *Rubric builds students' confidence and motivates learning*

The use of the AA rubric developed students' confidence in performing skills.

AA rubric actually helps us. We feel more confident because we know what standard we are at now before going for clinical attachment [clinical practice]. (Stud J)

The survey findings showed that about one-quarter of the participants were more proactive and willing to work harder.

### **Enriched learning through self-, peer- and teacher-assessment**

#### *Self-assessment increases self-awareness of student's performance*

Participants commented that the AA rubric made self-assessment possible. As such, they are better aware of their own performances.

We actually know which standard and category we are in. After each assessment task, we use AA rubric to check what we did. AA rubric tells us how we perform in each area of assessment, and how much effort we put into practice. (Stud SH)

Survey findings showed similar views with five participants stating that they were more prepared about what to do and better able to identify strengths and areas for improvement. It was also interesting to note that some questioned the accuracy of self-assessment.

How accurate is our own assumption of whether we are correct or not? We are just students, not teachers. Teachers have better understanding, so their rating is more accurate. (Stud SA)

#### *Peer-assessment and feedback enrich student's learning experiences*

Most of the participants in this study found value in having their peers evaluate their performance and give feedback for improvement. The results of the survey also suggested that in embarking on peer-assessment, students developed stronger bonds with their peers.

If we do the assessment on our own, we will not realize our own mistake. As for peers, they are like many eyes, so they can point out what our mistakes are. For example, if we

transfer a patient from one place to another, we may forget to consider the patient's safety. It will be helpful to have a friend telling you, "Hi, you forgot to check the patient's environment." This will help us do the proper procedure. So it's a pretty good idea to work in a group. We learn all the knowledge and skills quickly. (Stud R)

The survey responses indicated that more than half of the participants reported that through peer-assessment, they could exchange views, support one another and achieve a better understanding of required skill sets. Almost one-third of the participants shared that their peers give honest feedback, help them gain confidence in performing a skill and offer different views that make them think further.

However, a small number of participants expressed concerns about peer-assessment.

Sometimes it depends on the peers that you have. If your peers are immature, you have trouble getting their point of view. (Stud A)

In the survey responses, some students indicated that peers may not take note of one's mistakes because they themselves may be unsure. Conversely, sometimes peers may be overly harsh in criticizing another student's performance. Hence, peer-assessment may be cruel or disorienting.

#### *Teachers' feedback helps students to improve*

The majority of the participants agreed that teachers' feedback helped them to improve, and that they could clarify their doubts with teachers.

Teacher tells us the truth, and teacher helps us to improve. And then teacher knows more about the phase test, what we have to go through. And also that if you have any doubts, you can also ask the teacher, what we are lacking [of], at which part we [gone] wrong and teacher definitely will tell us. (Stud SH)

In the survey responses, more than half of the participants indicated that teachers are more experienced and more precise and accurate in providing feedback. Almost one-third of the participants stated that teachers are also more professional in helping students recognize their

strengths and weaknesses. Nearly one-quarter of the participants reported that teachers helped them to develop confidence.

### **Development of knowledge, skill competencies and critical thinking skills**

#### *Improve student's knowledge and skills*

Most of the participants agreed that the AA rubric helped them better understand knowledge and skill competencies.

AA rubric helps my knowledge, and do my steps correctly. So I then do more hands-on, and at the same time, I will apply the skills in practice. (Stud F)

More than one-third of the participants acquired better understanding of knowledge, and was better able to relate theory to practice.

#### *Increase awareness of how to make an appropriate clinical decision*

In this study, students need to consider the clinical condition of the case patient before thinking about what intervention to take. Participants shared their experiences as follows:

During the clinical assessment, I had to note that the patient has a heparin plug on the right hand, so this means no blood pressure taking over the arm with the heparin plug. (Stud G)

I guess I am a bit task-oriented. Despite knowing that the case patient was coughing and that affects the respiration rate, it just did not cross my mind that I need to stop counting the respiratory rate and allow time for the patient to settle. I really learnt a lesson about the need to relate what I learn to the real patient and make an appropriate decision. (Stud K)

From the survey findings, the nursing students noted that the use of the AA rubric in a case setting provided an authentic situation to think more deeply about the problem, analyze clinically relevant data and make appropriate clinical decisions based on what they know.

Nursing students shared that they were challenged to find out the rationale for specific nursing interventions before implementing.

### **Increased awareness of caring attributes and communication skills**

#### *More systematic approach in learning communication skills*

Some participants shared what they learnt about communication skills.

In terms of the verbal and non-verbal, like how we actually approach a patient, how we do the procedure in sequence, we understand the sequence better. (Stud AY)

In the survey results, nearly half of the participants shared that the rubric provides a more systematic approach to help students understand what it means to communicate with the patient. Almost one-quarter of the participants indicated that they are more aware of their own verbal and non-verbal communication skills.

#### *Increase awareness of demonstrating caring attributes*

Participants reported increased awareness of the importance of caring attributes.

Since we are first-year students, we do not know anything about patient care. Through this rubric, we know that in order to care, we need to listen. We better understand how to approach a patient and how to explain the nursing procedure to the patient. (Stud E)

The survey findings indicated that nearly half of the participants shared that they are more aware of the need to demonstrate caring towards patients.

## **DISCUSSION**

The findings of this study provided insights into nursing students' experiences and learning outcomes with the use of an authentic assessment rubric and a case approach. These

included clarity about specific learning goals; development of learners' confidence; enriched learning through self-, peer- and teacher-assessment; development of knowledge, skill competencies and critical thinking skills; and increased awareness of caring attributes and communication skills.

Rather than direct students' efforts based solely on past performance, the AA rubric encourages students to focus on current and future performances. As a result, students are motivated to work harder and are more willing to take responsibility for their own learning. Research has shown that assessment rubrics provide students with clearer learner expectations and help them work towards and achieve more focused learning goals (Andrade, 2009). Hence, the use of the AA rubric in this study offered greater clarity about learning objectives and helped students chart their progress.

Self-assessment helps students gain insights into their strengths and weaknesses in a formative way, and this facilitates personal and professional development (Cowan et al., 2007; Hoke and Robbins, 2011). Traditional assessment has generally been the norm in nursing education and perhaps students need time and practice to become acquainted with the use of alternative forms of assessment. Students need to learn that the focus of self-assessment is about understanding and reasoning. Klein and Fowles (2009) noted that students become good at self-assessment once they are convinced of its value and have had some practice with skill sets. When this happens, students begin to take on increased responsibility for evaluating their own and each other's work, and begin to internalize performance standards and apply them to future efforts. Hence, with increased self-autonomy, students develop a better sense of ownership of their own learning and growth.

In addition, peer-assessment is considered a key pedagogical strategy to help students gain new perspectives in reflecting on their own and their peers' performances (Andrew et al., 2008). This helps students locate their strengths and weaknesses, determine a better way to approach a task, and learn the necessary knowledge and skills to perform a task. Peer-assessment has resulted in increased student comprehension (Klein and Fowles, 2009). Andrade (2009) suggested that once students know that they can use peer feedback to improve on their own learning, they may be more serious and willing to put in effort into peer-assessment. After all, students are accountable for their own learning and they are able to achieve their learning goals by working together. Nursing students also need to learn how to use a rubric for self- and peer-assessments to respond effectively to clinical situations. This may be a challenge for nursing students who are used to traditional, teacher-centred pedagogy.

The AA rubric developed and used in this study offered a means for nurse educators to provide ongoing feedback and give concrete recommendations for improvement in clinical practice and decision-making (Hoke and Robbins, 2011). This helped nursing students understand how and why they receive a particular grade and how they can improve their performance. Nurse educators in this study were able to give students more precise and analytic reasons for their assessment as the rubric provided a more objective basis for assigned grades (Sharpnack et al., 2013). Development and application of the AA rubric and a case approach across other areas of the nursing curriculum would require support from school administrators for professional expertise in the design and implementation of authentic assessment. Systematic and thoughtful change in nursing practice requires equally thoughtful change in the education of nurses and the preparation of nurse educators (Benner et al., 2009a). Nurse educators need to

make a conscious effort to attend professional development courses, such as authentic assessment and pedagogy.

Use of the AA rubric with an authentic clinical case in this study helped students integrate both knowledge and skill competencies, and this forms an important foundation for the development of competent professional nurses. When used in a case context, a rubric offers instructors a way to develop and assess critical thinking skills (Bergjan and Hertel, 2013). Critical reasoning develops over time through varied experiences and not through one lecture or one clinical experience (Cowan et al., 2007). Nurse educators need to plan and design the teaching, learning and assessment activities so as to help students develop critical thinking, better identify problems and anticipate what needs to be done.

Caring is a universal nursing phenomenon, and the ethic of caring is central to teaching excellence in nursing education (Sawatzky et al., 2009). Effective communication is widely regarded as a key determinant of patient safety, satisfaction, and compliance with self-care (Effken et al., 2011). Hence, communication is acknowledged as a core competency of nurse education programmes. Research has similarly shown that a rubric helps students in effective communication and professional growth (Aronson et al., 2013; Hoke and Robbins, 2011).

### **LIMITATIONS**

The first author in this study was involved in the entire process of designing the rubric, implementing the project, conducting the focus-group discussion and analyzing the results. Hence, the interpretations could be that of the first author as the researcher, although efforts were made to triangulate findings through member checking. Moreover, this study was conducted on a small scale with 39 first-year nursing students, and this may limit the generalizability of the findings.

## **CONCLUSION**

There were a number of positive outcomes in the use of the AA rubric with a case approach in the nursing module in this study. Nursing students noted that the AA rubric provided clarity and direction for their learning goals; built confidence; developed knowledge, skill competencies and critical thinking skills; increased awareness of caring attributes and communication skills; and enriched learning experiences through self-, peer- and teacher-assessments. Both nursing students and educators have suggested further refinements to the AA rubric and the supporting cases. Some students have suggested that icons could be used to represent the domains, for example, the icon of a heart to symbolize caring. A colour code could also be used for the different levels of proficiency in the AA rubric. In addition, students have suggested capturing nursing procedures on video for review and critique using the AA rubric.

This study has sought to inform nurse educators about the experiences and learning outcomes of nursing students using an authentic assessment rubric in a case setting. The challenge for nurse educators will be to educate nursing students in a climate that fosters professional attentiveness, responsibility and excellence. Further research is necessary to investigate nursing students' learning attitudes and behaviours and nurse educators' experiences in using authentic assessment rubrics in case contexts.

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**Table 1: Authentic assessment rubric (Section D) (Author, 2012)**

Criteria	Levels of performance				Comments
	Emerging	Developing	Proficient	Exemplary	
<b>D. Critical thinking skills</b>					
Situational analysis	Repeats basic information with prompting for documentation	Summarizes available information for documentation and discussion with colleagues	Prioritizes available information for documentation and discussion with colleagues	Synthesizes available information and possible patient outcomes for documentation and discussion with colleagues, and relates ongoing findings to potential complications	
Clinical judgment	Recognizes variations in patient condition, but needs help in prioritizing	Makes clinical decisions correctly with some prompts, e.g. selection of nursing interventions	Makes clinical decisions correctly, e.g. priorities in patient care	Makes clinical decisions correctly with sound clinical reasoning and modifies nursing interventions based on patient's condition	
Response to clinical situation	Sometimes reacts and participates appropriately in patient care within the expected time	Usually reacts and participates appropriately in patient care within the expected time	Participates spontaneously most of the time and appropriately in patient care within the expected time	Consistently participates spontaneously and appropriately in patient care within the expected time	

**Table 2: Development of Performance Assessment task/case using the UbD and GRASPS Model (Author, 2012)**

<b>G.R.A.S.P.S.</b>		
<b>Performance Task</b>	<b>Goal</b>	Your goal is to help a patient who has difficulty in swallowing.
	<b>Role</b>	You are a Year One student nurse attached to a Medical Ward during Clinical Practice.
	<b>Audience</b>	Patient (Standardized Patient or Human Patient Simulator)
	<b>Situation</b>	Mr Wong, 60 years old, is diagnosed with right cerebral vascular disease and presented with dysphagia and left side weakness. He has history of tuberculosis and is currently admitted for respiratory infection.  At 0730 hours, Registered Nurse asks a Year One student nurse to check the vital signs and insert a Nasogastric (NG) tube for Mr Wong.
	<b>Performance or Product</b>	Students are given a clinical situation; they need to analyze the situation, make appropriate decisions, respond to the patient's condition, and address the emotional needs of the patient.
	<b>Standards for Success</b>	You should be able to <ol style="list-style-type: none"> <li>1. demonstrate the competency in checking vital signs</li> <li>2. perform NG tube insertion</li> <li>3. analyze the situation and make appropriate decision</li> <li>4. respond to patient's condition appropriately</li> <li>5. address the emotional needs of the patient</li> <li>6. conduct health education for patient with NG tube</li> </ol>
<hr/>		
<b>H*O*T*S:</b>	<b>Facet 1 – Explanation</b>	
<b>Higher Order Thinking Skills</b>	(provide thorough and justifiable accounts of phenomena, facts, and data)	
<b>(The Six Facets of Understanding)</b>	<ul style="list-style-type: none"> <li>• Assess patient's condition and collect required assessment data</li> <li>• Demonstrate the skills of vital signs checking, NG tube insertion and aspiration</li> </ul>	

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## **Facet 2 – Interpretation**

(provide a revealing historical or personal dimension to ideas and events; make subjects personal or accessible through images, anecdotes, analogies, and models)

- Evaluate the situation based on the assessment data collected
- Explain the rationale for the nursing interventions

## **Facet 3 – Application**

(effectively use and adapt what they know in diverse contexts)

- Apply the knowledge and skills learned to the real-life situation
- Solve real-life problems based on prior knowledge

## **Facet 4 – Perspective**

(see and hear points of view through critical eyes and ears; see the big picture)

- Analyze the patient's condition based on the assessment data
- Make appropriate decisions in the best interest of the patient

## **Facet 5 – Empathy**

(find value in what others might find odd, alien, or implausible; perceive sensitively on the basis of prior indirect experience)

- Understand and show empathy towards patient while patient experiences pain or discomfort
- Consider and relate patient's emotional needs in the plan of care

## **Facet 6 – Self-knowledge**

(perceive the personal style, prejudices, projections, and habits of mind that both shape and impede our own understanding; they are aware of what they do not understand and why understanding is so hard)

- Reflect on performance during the assessment
- Recognize personal strength/s exhibited during performance and identify area/s for improvement

**Assessment**

Analytical Rubric

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**Table 3: Themes and sub-themes emerging from the data**

<b>Themes</b>	<b>Sub-themes</b>
Clarity about specific learning goals and development of learners' confidence	Rubric provides guides and directions
	Rubric builds students' confidence and motivates learning
Enriched learning through self-, peer- and teacher-assessment	Self-assessment increases self-awareness of student's performance
	Peer-assessment and feedback enrich student's learning experiences
	Teachers' feedback helps students to improve
Development of knowledge, skill competencies and critical thinking skills	Improve student's knowledge and skills
	Increase awareness of how to make an appropriate clinical decision
Increased awareness of caring attributes and communication skills	More systematic approach in learning communication skills
	Increase awareness of demonstrating caring attributes