Instructional Methods in Health Professions Education by ธนยุจัตน์ ปังเส็ง

This level is hell!

This level is currently nearly impossible to beat without boosters.

This is probably caused by a design error, glitch, or an objective which requires extreme insane luck to fulfill.

This level is currently one of the hardest, if not the hardest level in the game.

This template will be removed when the level is nerfed.

There are a total of 5 peer gradings in this course, each of which requires evaluation of 3 peers and a self-evaluation (which does **not** affect your score)[1]. For some reason, only the first one permits written feedback to be given; if you wish to give written feedback in the other parts, please do so here. (I do check my 'other' folder for this purpose.)

The instructors' goal in creating the peer assessments is to encourage your active engagement with the course material allowing for helpful feedback and discussion on items that do not lend themselves to multiple choice question assessments.

Also, while it may seem daunting, the notion of a 'randomly assigned' grader has the potential to be very fruitful. If you as a learner put in the effort on the peer assessments, then your peers will too. Given that this is a community of individuals interested in Health Professions and the education of professionals, I trust that most of you will be fair and thoughtful in your support of one another's learning. I recognize that some individuals will be limited by time or availability and so I don't believe it would be wise to ask you each to do a multitude of peer assessments. Each of your peer gradings will be assessed by a minimum of three peers, and you in turn will assess the work of three peers. This allows for multiple sampling opportunities, as well as a variety of feedback. As I mention in an upcoming lecture video, no assessment is perfect, but we as teachers and learners do the best we can!

Peer grading	Max. score	Relevant lecture
Creating ILOs using Bloom's Taxonomy	1	2.1
Simulation	4	5.1
Reflection	6	6.1
Large Lecture Format	4	7.1
High Fidelity Clinical Simulations	2	7.3

All peer gradings have the same weight, regardless of their maximum score.

Answers are in pink.

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[1] The formula is that your self-evaluation score is used only if between 0% and 5% greater than the score given by your peers (out of the maximum score); also, there is no rounding, so the maximum score must be at least 20 to make a difference.

Creating ILOs using Bloom's Taxonomy

For each of the following scenarios, create three learning objectives using Bloom's Taxonomy. Including only 8 learning outcomes (or less) will not score the point; only with all 9 will the point be given. Please construct your statements with action verbs that reflect the level of learning you would want your students to achieve:

You have been asked to teach first year health professions' students how to take a history from a patient. At the completion of their course, what 3 learning outcomes would you expect them to achieve?

1. List specific components of a complete Patient History. (Bloom's Taxonomy Level: Knowledge)
2. Demonstrate sensitivity and respect for patient confidentiality when obtaining social and sexual history by setting the stage for the clinical encounter and introducing the context of questions during the patient interview. (Bloom's Taxonomy Level: Application)
3. Organize history-taking questions in a logical and thoughtful sequence throughout the patient interview to elicit all related information in a comprehensive, yet efficient manner. (Bloom's Taxonomy Level: Synthesis)

You are teaching a Humanism in Medicine course that is focused on mitigating health care disparities and improving access to care. At the completion of the course, what 3 learning outcomes would you expect your students to achieve?

1. Describe at least three examples of health care disparities in contemporary medical literature across medical and surgical specialties. (Bloom's Taxonomy Level: Knowledge/Comprehension)
2. Outline possible reasons for disparities in access to care for routine preventive screening procedures (e.g. Pap smear, colonoscopy, etc) that might occur at an environmental level, individual level (patient or provider), or systems level. (Bloom's Taxonomy Level: Analysis)
3. Relate how an increasing number of studies on health care disparities informs a growing body of literature on quality and outcomes of care and describe potential future ramifications for health care policy and health services research. (Bloom's Taxonomy Level: Synthesis)

You are a program director who is training individuals to act as birth attendants outside of a hospital setting. At the completion of their training, what 3 learning outcomes would you expect your learners to achieve?

1. Identify high-risk conditions and illnesses that may be life-threatening to maternal or fetal health and require referral. (Bloom's Taxonomy Level: Knowledge)
2. Recognize the onset of labor and progression through stages of labor. (Bloom's Taxonomy Level: Comprehension)
3. Evaluate the newborn at birth and provide appropriate care. (Bloom's Taxonomy Level: Evaluation)

Simulation

Your peer will assess the following when they review your work (1 point each):
Provided an example that could be used for a simulation exercise
Provided a brief overview of reasonable learning outcomes that were logical for the task or exercise suggested
Provided a brief description of what the simulation might be and/or include. Things such as content or form as well as general explanations of the type of simulation should obtain credit.
Briefly described type of assessment or grading rubric that would be used during the simulation.

Please provide an example from your own health professions environment of a skill, task, group process, or other relevant example that could be translated into a simulation for assessment. Once you have described the example, then briefly suggest how the simulation could be constructed and what your learners would be assessed on, that is, what would be your intended learning outcomes. In addition, you should briefly describe the manner in which you would score the simulation--global rating scale? checklist items? etc.

For a problem-based setting, the students are given a case scenario in which they have the task to solve the medical problems of the patient based on their scientific background as well as acquiring new information if required. Students are working in groups, they are given the first session in full for group discussion, then pass one week for self-directed study and finally come to the second session prepared for oral presentation of their work. At the end of the two session, students should be able to identify the causative factors of the medical problems, extract the objectives needed to be achieved in order to solve the problem and represent their knowledge orally. A facilitator's role is to ensure that all groups extracted the precise objectives.

A global rating scale is prepared and used in the assessment of each group based on the following criteria:

- All the required objectives are identified by the students.
- The medical problems of the patient are correctly targeted.
- The scientific content of the presentation is clear for their classmates.
- The time taken for the presentation is not exceeded.
- The overall patient's case management is satisfactory.

Reflection

For this peer assessment, please answer the following 3 questions regarding reflection. The intent is for you to engage in the process of reflection and share those impressions with a peer in the course.

Your peers will evaluate you on the following elements (1 point each per question):
1) Evidence of thoughtful engagement with the question as demonstrated by complex thoughts, explanations, and descriptions. Insufficient evidence would be providing a single sentence or two, rather than a full answer
2) Congruence between the question asked and the content provided in the answer. This is evidenced by the inclusion of appropriate topics and 'sense' making. Again, insufficient evidence would be providing a single sentence or two.

Who was your most memorable teacher and why? What types of attributes did they exhibit that made them memorable? Was it a positive or negative experience?

Ms Suseela, who essentially guided me not only in her subject, but also in other subjects which I was struggling with and even my social skills. She always has a positive attitude and high expectations of me (and other students); also, she has many ways of explaining concepts such that I never misunderstood anything that she covered with me. It was definitely a positive experience!

Describe a memorable teaching experience that you have had as a teacher or instructor. Why was it so powerful? Would you do the same thing again, or would you change your technique?

While I never actually took on the role of an instructor as such, I once taught a group of primary school kids in Cambodia. This was really powerful since I got to learn more about their culture, about how even the monetary costs don't matter to their agrarian society, since they are needed more at home to help with the crops and livestock, preventing them from getting an effective education (something many take for granted in Rawai and Singapore) that could help them break out of poverty and lead better lives. This is one instance where the 'instructor' had plenty to learn as with the students. I would gladly do it again!

What is difficult about a reflective exercise? What components may cause discomfort? What issues may arise for the individual answering the questions?

A reflective exercise can be surprisingly difficult (see the template right at the beginning). It can be difficult to acquire the skill to write effective reflections. Components of reflective exercise that may cause discomfort include emotions and lack of structured approach and coaching (student may say "am I doing it right?). The issues that can arise for the individual answering the questions are confidentiality and ethical considerations.

Large Lecture format

This assignment is meant to test your creativity and design. Please use a topic from your own teaching environment. This can be a lecture you already teach or one you are considering teaching.

Your peer will evaluate you on the following elements (1 point each):

1) Evidence of thoughtful engagement with the question as demonstrated by complex thoughts, explanations, and descriptions. Insufficient evidence would be providing a single sentence or two, rather than a full answer.
2) Congruence between the question asked and the content provided in the answer. This is evidenced by the inclusion of appropriate topics and 'sense' making. Again, insufficient evidence would be providing a single sentence or two.
3) Description of the intended outcomes or purpose of the lecture. This should also describe the lecture topic.
4) Incorporation of EITHER "clickers" or "back channel" discussions in the structure of the lecture. How would the technology be utilized?
- If using "clickers", what types of questions might be asked? You may provide general topics and levels of discussion or specific questions if you'd like.
- If using "backchannel" discussion, what software or technology would you employ? How would you encourage discussion? Who would monitor the discussion? How would you use the "backchannel" discussion to inform your lecture?

Describe how you would incorporate EITHER a live-time in-lecture "clicker" response system OR a live-time in-lecture "back channel" into your lecture.

I have incorporated a **live time in-lecture clicker response system** using Kahoot, a mobile app that incorporates color and sound and really engages students. At first I used an icebreaker question (Cats or dogs?) to familiarize students with participating using it in a way that was nonthreatening so they didn't feel pressured. Next, I used Kahoot to doublecheck that they could recall the definition of the 4 types of literature (primary, secondary, tertiary, and review) articles that were covered in the previous lecture. The survey results showed that clarification was needed about tertiary and review articles, which I was able to do briefly, then this confirmed knowledge was built upon for the rest of the lecture for how to determine the quality of health information online.

High Fidelity Clinical Simulations

This exercise is meant to allow you the opportunity to 'discuss' high fidelity simulation with a peer. By answering the questions and then providing feedback to one another, I hope to stimulate a dialogue. To that end, feel free to ask a question within your response that your peer reviewer can then directly answer (strangely, there is no comment box for them to answer to).

Your peer will evaluate you on the following elements (1 point each):
1) Evidence of thoughtful engagement with the question as demonstrated by complex thoughts, explanations, and descriptions. Insufficient evidence would be providing a single sentence or two, rather than a full answer.
2) Congruence between the question asked and the content provided in the answer. This is evidenced by the inclusion of appropriate topics and 'sense' making. Again, insufficient evidence would be providing a single sentence or two.

1) Do you incorporate a high fidelity simulation into your teaching? If so, please briefly describe the simulation, the technology, the intended outcomes, and the logistics. Do you have a simulation center? How do you assess performance? What would you consider 'best practices'?
2) If you do not incorporate high fidelity simulation, why not? What might you need in your environment to create high fidelity simulations? What questions might you have for someone who uses high fidelity simulations regularly? What might you or your faculty need in terms of support or training to begin simulations?

As a general rule pre-hospital health care is geared towards intervention rather than prevention which means that our training tends to be heavily skill focused. As such we have **access to many varieties of high fidelity simulation** options from highly realistic teaching mannequins to cadaver labs. Basic course work includes weekly testing scenarios geared towards placing the learners in an evolving situation that requires that they not only identify the underlying health issues but demonstrate proper interventions and management. We also use High Fidelity mannequins and cadaver simulations to demonstrate and perfect technical skills from simple IV starts to more complex and infrequently used skills like Surgical Airways.

 Our work as paramedics is often time sensitive and the fact that we are not definitive care for our patients is reinforced over and over during our training. As such our use of High Fidelity teaching methods is designed to force learners to multitask and perform physical interventions while simultaneously developing treatment strategies which would be impossible without the use of teaching mannequins to drive home the actually real world time each interventions requires.

Not surprisingly these teaching methods require a large amount of props, mannequins and simulations space and as such my particular service has placed a large simulation center in each of the major regional "mothership" bases and has created a very high tech mobile simulation lab for more rural areas. We also work closely with hospitals to allow medic access to patients and cadaver labs to practice our high risk/low volume skills. Lastly we also work closely with our ancillary services like Police, Fire and Military to runs annual "mass casualty" sims to test system readiness which tend to be fabulously high fidelity. I worked a bombing sim several years ago and they had actually hired an actor with an above the knee leg amputation to play a bomb victim with a severed leg.   The make-up was GROTESQUE but it allowed for all of us to truly immerse ourselves in the simulation, which in the end is the whole purpose of high fidelity simulations.