AMERICAN SOCIETY FOR MICROBIOLOGY

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2013 Biology Scholars Program

Post-Institute Homework Assignment #1: Course Alignment Activity

Feedback Chart

	Name	Facilitator: Positives	Facilitator: Suggestions for Improvement	Alumni: Feedback
CAROL'S TEAM	**Nathalia Holtzman**	Unique summative assessment options; using rubric design as a formative assessment is an excellent idea; varied types of learning objectives.	Make sure there is actually some "formative" part of the formative assessments. In other words, will students receive feedback from these assignments that connect to the summative assessment process? Try to unpack what you mean by "understand" or "gain an understanding of." Can you provide specific questions you will challenge students with for both the FA and SA experiences?	Really great alignment on this grid.
	Tatiana Tatum Parker	Nice set of objectives; varied types of formative assessments.	Make sure there is actually some "formative" part of the formative assessments. In other words, will students receive feedback from these assignments that connect to the summative assessment process? What is RSQCC? Can you provide specific questions you will challenge students with for both the FA and SA experiences?	I like the alignment.
	Maureen Whitehurst	Nice set of content-related objectives – do you have any non-content objectives? I like the idea of having class discussion but wonder how it can be "formative."	Make sure there is actually some "formative" part of the formative assessments. In other words, will students receive feedback from these assignments that connect to the summative assessment process? Can you provide specific questions you will challenge students with for both the FA and SA experiences? Have you explore other options for	The formative assessments can probably be more creative to incorporate different ways that students might understand this material. You might want to think of more active teaching techniques (there are many out there) to at least vary the information delivery style.

			SAs besides exam questions?	
PATRICE'S TEAM	**Lee Abrahamsen**	VERY good job covering multiple layers of cognitive domains. Objectives are clearly written.	Actually provide examples of the questions you want to use so that you see that your questions are at the same cognitive level as your objective.	I'm not sure if doing clicker questions itself is a good formative exercise for developing the skill of learning to work in groups. A formative activity would probably have to teach the students the dynamics of group work and how to assume and work with different roles. The summative activity should reflect whether or not the students developed that skill or not. It was not altogether clear from the grid if that was the case.
	Crystal McAlvin	I love how one assignment is covering multiple Bloom's levels – and that all the levels are covered. Varied formative assessment forms is a great idea. The concept map really helps students connect ideas and tells you to what level they're thinking about the material.	Examples of specific questions you would ask would be a great addition in order to ensure the questions also align with your objective level.	The objectives need some built in assessment standard. (See Mager's criterion.)
	Mary Shaw	I love seeing the affective domain in here and the self-assessments. These are important critical thinking skills that are difficult to capture in a traditional "Bloom" taxonomy. There are a variety of appropriate formative assessments that seem like they were chosen thoughtfully for the type of data they will provide	Providing some examples of the summative question assessments would be helpful in aligning your grid. It would allow you to double check that you're testing on the levels that your objectives are written for. How will you assess student responses to how they learned for the summative assessment piece?	I always find objectives like 'reason through...' and 'use quantitative...' difficult to operationalize. It's not impossible to measure but I find that people have various ways of doing the above and all of which are not necessarily correct. I'd err on more specific concepts that you'd want them to think about in a certain way.
	Didem Vardar-Ulu	Starts very detailed, which is great. The verbs are bolded in the objectives which brings attention to the cognitive level. The formative assessments are appropriate for the content of the course.	I wonder if having some formative assessments that are similar to your summative ones will help students practice providing the level of detail you expect? What I mean is that there is ample opportunity for students to practice doing problems and you'll be able to tell how deeply	Thorough. I personally like the use of Fink's dimension. I lean more on that than Bloom.

		This grid is very intentional and integrated. A very nice package!	they understand the content, but there doesn't seem to be formative assessments that allow you to give them feedback on writing or presenting before they are "graded" for it.	
KERRY'S TEAM	**Maura Pavao**	I really like how your formative assessments take care of all types of learners with a combination of videos, journal articles, lecture, and lab. Your LOs are a good combination of knowledge, application and connecting ideas in a way that seems to build up from the beginning towards the end of the semester and from what you told me about your student population, this seems like a good approach.	This is picky but I think you should change the wording of the learning objectives from "explaining" to "explain" so the students have no question about the fact that THEY will have to explain this concept and it may be more consistent with LOs from their other classes. For any formative assessments where you specify questions, add some specific examples or types of questions you want to ask so as you go through the semester, you can always come back to the grid to makes sure your questions are aligning with your learning objectives and it's a reminder of what you really wanted when you came up with that objective b/c we often forget as curve balls and new ideas come up throughout the semester. Also, I think anything that has a lab component would involve analysis and evaluation under Blooms assuming students are collecting, analyzing data and evaluating the results. If that's the case, you could include some of these HOCS questions on the exam such as interpreting data or representations of data (graphs, sequence alignments?).	Intriguing how all of the summative assessments are exam questions. I'm wondering if there are any other summative ways to assess learning gains that might itself incorporate a different skill.
	Anne Rosenwald	Excellent job incorporating multiple cognitive levels throughout so many LOs. You also have a good mix of learning experiences (journal articles,	For your learning objectives, maybe add some of the action words in you have in the next column to the content so the students know which of those concepts will need to be able	Thorough.

		labs, data analysis, computer exercise, article presentation) that will keep students engaged and that seem to fit together well and flow throughout the semester so students can master these as they practice them with varying content.	to know vs. comprehend vs. apply and evaluate, etc. You could also mix your process objectives in with the content so it doesn't come across as two separate things to your students. It may help to include some examples of those knowledge prequiz questions and match those with summative assessment questions on the same concept that are higher order to see the transition from "they know it" to "they know what it means and how to apply it."	
	Matthew Waterman	You have a good mix of content and skills objectives and nicely cover a wide range of cognitive levels. The create your own study guide skill should be very useful to them throughout the rest of their education and will likely result in some real metacognition as they try to organize complex concepts into the kind of document that is designed to be clear, easy to follow, and show how ideas from throughout the semester connect and overlap. I think we may have talked about this—You may want to encourage them to try different lay outs as they do this (outline form vs concept map vs tables) and share their design with others to see what contributes to deeper understanding of the concepts for the different styles of learners in your class.	I think it would help you when writing exams and IF-AT questions to be more specific with some of your LOs. For example you have "explain how a cell functions at the molecular level" with knowledge and comprehension. That could mean a lot of things in terms of how much you want them to know about that. Do they need to know all of the signaling pathways or just the basic functions of the 4 macromolecules? To help with this you could either including some specific questions you would ask or modify the LO to say (just as an example)"explain how a cell functions at the molecular level by identifying 4 (?) fundamental functions each macromolecule plays in maintaining cell function and explaining how each function is related to the structure of the molecule" If you do something like this then it will make it easier to write questions that you can be ensured align with what you really want them to get. This may be too specific for your LOs but as a student I would be unsure as to what I needed to understand. It will also help you	I think it would be good if both the formative and summative assessments included something that helped the students develop the skill of answering questions in particular ways (writing papers, m/c, etc.).

			differentiate the types of questions you want to ask for your "explaining" LO versus your "interpreting" LO.	
KRIS' TEAM	**Megan Howard**	Great job.	I like that you are teaching both content and "soft" skills. The soft skills are a little bit more difficult to assess, but have you considered having each group member assess the others in the group?	If the students are being examined using multiple choice in the summative, I think that that style of question should also be given in the formative. The skill of evaluating multiple choice answers might be a skill itself that might need formative development.
	Jerry Kavouras	Well done. The objectives and assessments are well aligned.	None.	I like the alignment, but I wonder why the use of SimBio. Is it an online course? Does the course not have an associated lab? Just wondering.
	Eric Spana	Great effort. The objectives and assessments are aligned.	Lab courses are both easy and difficulty to assess. Your sabotage activity is a great one. Do you have an assessment strategy for that skill? I don't remember what the lab feedback activity is, but will that prepare them for the quizzes? Sometimes practice is helpful.	I usually think of quizzes as formative, but maybe your quizzes are high stakes?