Student Self-Assessment Checklist

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One way of fostering agency and self-efficacy in students, increasing their accountability for their learning, and reducing negative self-perceptions regarding assessments, is to provide students with an overview of the course in the form of a checklist. Encourage them to refer to the checklist as the semester progresses to monitor their own learning. This can be achieved by creating a chart like the example below and making it available to students:

STUDENT SELF-ASSESSMENT CHECKLIST EXAMPLE
SCI 100: Introduction to Science

•Successful completion of the course requires demonstrable knowledge of the following items.
•The course focuses on areas of content learned through group and individual work.

	You should be able to:	I can	I think I can	I can't
1.	Distinguish between true and false sciences.			
2.	Name the genus and species of common animals such as cats and dogs.			
3.	Read a mercury thermometer.			
4.	Trace the path of blood from the heart back to the heart in writing.			
5.	Demonstrate knowledge of bones in the human hand orally.			
6.	Demonstrate knowledge of scientific terms, such as theory and hypothesis.			
7.	State reasonable, testable hypotheses and explain what makes them so.			
8.	Design a plan to solve a problem using the scientific method.			
9.	Demonstrate knowledge of different ecosystems.			
10.	Identify/characterize/define a current problem in science.			
11.	Explain what a food desert is and demonstrate its potential effects on humans, particularly those from traditionally marginalized populations.			
12.	Work successfully with a group to produce a researched report on an assigned topic related to science, such as recycling or soil erosion.			

The numbered column facilitates discussion of the checklist. The second column can be pre-populated with the intended learning outcomes for the course, which you can take directly from the syllabus.

As you progress with the students during the semester, remind them from time to time to use the checklist. You can do this by saying something such as: "By the end of this week, you should be able to check off Items 6 and 7. If you need to mark either of those as 'I think I can,' you can review the handout, Hypotheses in the Scientific Method, which is in the Resources folder in Blackboard, to bring yourself up to speed. If you need to mark either of these as 'I can't,' review the handout, study your group annotations on chapter 5, and be sure to speak with the TA about it in Recitation, or make an appointment to come to virtual office hours."

REFERENCES

- Cleveland State University Chemical and Biomedical Engineering Department. (2020). Chemical Engineering Student Learning Outcomes. Retrieved from https://www.csuohio.edu/ engineering/ chemical/chemical-engineering-student-learning-outcomes
- Korgan, C., Durdella, N., & Stevens, M. (2013). The development of academic self-efficacy among first-year college students in a comprehensive public university. In T. T. York (Ed.), Higher Education in Review (Vol. 10, pp. 11-38). N.p.: Higher Education Student Association. Retrieved from http://sites.psu.edu/higheredinreview/wp-content /uploads/sites/36443 /2016/02/V10_Complete. pdf#page=13
- O'Meara, K. (2013). Advancing graduate student agency. In T. T. York (Ed.), Higher Education in Review (Vol. 10, pp. 1-10). N.p.: Higher Education Student Association. Retrieved from http://sites.psu.edu/higheredinreview/wp-content/ uploads/sites/36443 /2016/02/ V10_Complete. pdf#page=13
- University of Pittsburgh Department of Bioengineering. (n.d.). Swanson Engineering Bioengineering UG Handbook. Retrieved from www.pitt.edu › ~arm19 › documents › UG-BioE-Handbook
- University of Washington. (2016). PYTHON 100 Course Syllabus. Retrieved from https://canvas.uw.edu/courses/1026775/pages/python-100-course-syllabus