# *\*I have highlighted the portion of my action plan that I believe might be worth including on a larger poster as it has applicability to a wide variety of plans and is relatively simple to include if folks are already collecting data.*

# **Faculty Learning Community Action Plan**

**Choose an action**

**What goal is your first priority?**
Add more modalities of assessment; in particular so students can select the most appropriate means for THEM to demonstrate their learning and comprehension [Dimesion #3]

**What is the action you want to pursue to accomplish this goal?**
There are a few things I plan on doing to help improve the equity of my assessment practices. First I want to add more variety so that for a given topic that students have multiple venues to select from to demonstrate their learning (e.g., written paper or podcast or wiki page). I also want to incorporate learning-oriented assessment (LOA) into 2 of my courses and possibly low-stakes testing. In short, I want to shake up my approach to assessment such that it is more equitable.

**Why do you believe that this action will help you accomplish your goal? (Here, you can reference a reading, provide a link, or simply describe how this action is based in research on equity practices.)**
Learning-oriented assessment (LOA) is an approach that incorporates elements of the flipped classroom where more onus is placed upon the student to acquire knowledge through performing meaningful work. It also incorporates elements of self and peer assessment, as well as timely instructor feedback to enhance learning (Carless, 2015). This approach changes the focus of feedback as it becomes a means to promote more reflection and hopefully helps to enhance metacognition as well as skill awareness. These are mechanisms that have been shown to help close the equity gap (She, 2004; Smith et al., 2020; Charley, 2022), and so this approach is simply my means to that equity end.

Bibliography
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She, Hsiao-Ching. “Facilitating Students’ Learning of Difficult Science Concepts through Integrating a Metacognitive Approach into a Web-Based Multimedia Science Learning Program.” Computers and Advanced Technology in Education 428 (December 2004): 54–59.

Smith, Annie K., Sheila Black, and Lisa M. Hooper. “Metacognitive Knowledge, Skills, and Awareness: A Possible Solution to Enhancing Academic Achievement in African American Adolescents.” Urban Education 55, no. 4 (April 2020): 625–39. https://doi.org/10.1177/0042085917714511.

**To-Dos, Dates, and Challenges**

**What are the concrete steps and dates for your action? NOTE: you have 10 lines for this exercise, so keep that in mind as you list out your steps and dates.**
Determine how to change/modify assessments in my spring semester Neurobiology course [summer; target date June 1]
Generate new/modified assessments in this course that include more feedback aspects so students better engage with feedback [summer; target date July 15]
Generate and/or extract student exemplars to preface each type of assessment so students are able to decipher the contents of a well-done assignment [summer; target date August 1]
Modify content in the course to better reflect the assessments such that there is consistent agreement between them so the goals and outcomes are hopefully consistent [summer and fall; complete ~60-75% before classes start in the fall; target date for 100% completion December 31]

**Potential Challenges or Unanswered Questions**
I'm still in the process of determining what types of assessments will work best in this initial pass. The Neurobiology course is smaller, with ~20 students enrolled, and most taking it as an elective for their major or a requirement of the Neuroscience minor (which in and of itself is self-selecting).

I am thinking about removing exams (i.e., high-stakes assessment) and replacing them with group take-home open-book quizzes. While this isn't necessarily LOA, I also wanted to introduce student exemplars of similar assignments prior to each (which is LOA). The in-class task will be to dissect and discuss what made the specific exemplar so successful. Some previous work has shown that using good student examples is a useful means to getting students primed to self-evaluate because they have a reference point.

I am also thinking about what to replace some other smaller point-value high stakes grade items. My initial tentative thoughts are to replace them with shorter written format assignments that require students to make connections between the content and something in their own lives.

**Resources to help you**
I have begun to gather a number of examples from articles published in the Journal for Undergraduate Neuroscience Education (JUNE), which has a number of ideas, approaches, and materials directly related to my course content. I will gather more and pour through all of this material to determine what fits best with the content of my specific course, my student populace, and my instructional style.

I will also explore other pedagogical resources to ensure that I do not have Neuroscience blinders on when developing these new materials.

Once I've developed the materials I will touch base with the pedagogy expert in my department, as well as the faculty development center on my campus, to provide feedback to my design to help ensure that my changes have the best chance of providing a meaningful and positive impact.

**Evaluating Effectiveness**

**What resources are available to you to quantitatively measure the effectiveness of your action plan for students?**
I will compare performance on various assignments that assessed similar content across multiple years. Fortunately I have rather detailed records of grades on various assignments (down to the points earned on individual questions) in this course, so I can tease apart performance on very specific content prior to the introduction of these changes (iterations in 2017, 2019, 2021, and 2022) and after the introduction of these changes.

**What additional ways will you determine the effectiveness of your action plan for students?**
I will develop student evaluation and perception questionnaires to assess their thoughts and feelings on various pedagogical approaches, their comfort with the content, their comfort in the classroom, and their perception of instruction. My plan is to collect this feedback at the beginning, midpoint, and end of the course.

I will also develop a brief retention questionnaire (feelings towards staying in the minor and/or major, feelings towards staying enrolled in the institution) using the Likert scale, as well as having a follow-up question where students can expand on their rationale for the score selected. This will hopefully provide a means to gathering more persuasive data.

**What about you? Is this plan something you can sustain? How will you determine if you need to make adjustments to help you avoid things like burnout or work overload? What efficiencies can be built in? What would be your sign that you need to stop this action?**
Ultimately this will likely come down to how much time does it take to effectively grade various types of assessments. I believe that this will be sustainable because I already utilize a written exam format that requires a time investment from me to grade, but this new format should more evenly distribute this grading load across the semester rather than concentrating it into smaller time points (i.e., when tests are administered).

As someone who does not like to fall too far behind with their grading load, I know that if I'm not able to provide feedback in any sort of timely fashion that I will have to pivot to something else more sustainable.

If the load is too much, then adding more points for peer and self evaluation is a likely adjustment that can be made. I already have a project in the course where they are required to provide a draft that is then peer-reviewed. This change significantly reduced the grading load (i.e., time) for that specific item.

Finally as a high energy person, if I'm feeling drained and apathetic about the course, then this is a clear sign that things are not sustainable. This is probably my favorite course to teach for a variety of reasons, and if it is no longer enjoyable then clearly I've taken the wrong path and will need to course-correct.

**Prioritize Your Goals**

**Medium Priority:**

* Increase exposure to resources that are available and listed on the syllabus (a resource is not of use if no one is aware of its existence) [Dimension #1]

**High Priority:**

* Add more modalities of assessment; in particular so students can select the most appropriate means for THEM to demonstrate their learning and comprehension [Dimesion #3]

**Lower Priority:**

* Find ways to encourage and promote communal/collectivist learning, and to ensure that the composition of those groups is varied more than previously. In addition being more deliberate about the guidelines for communication within the group [Dimension #4]