## Teaching Notes: Answer Checking

### By *Jayme Dyer*

*dyerj@durhamtech.edu* or *jaymedyer3@gmail.com*

**Course Information**

Department: Science

Level: **Introductory**

Course type: **Lecture & Lab**

Students: **Majors & Non-majors**

Number of Students: 17

**OVERVIEW OF HOW I USED ALL BIOMAAP MODULES IN ONE SEMESTER**

**Modules Used this semester**

* Introduction to BIOMAAP – student version (PPT)
* Introduction to Growth Mindset (PPT & Handout)
* Value of Mistakes (PPT)
* Answer Checking (PPT & Handout)
* Reflective Writing

I implemented all of the modules in the lab section of my course during a 4-week period in my semester-long course.

Based on my experience, I recommend:

* **Start implementing modules from the beginning of the semester** (instead of 4 weeks after the start, as in my case, due to delays from IRB approval for the Faculty Mentoring Network). *Set the stage for how to think about math anxiety from the very beginning of the course.*
* **Incorporate the modules *throughout* the course**. Don’t just present the powerpoint or handout once and then not refer back to it again (as I did). For example, after going through the Answer Checking powerpoint and handout, have students explicitly practice answer checking with their own work (or others’ work) throughout the course.

**Module Information**

Original Module Name: Answer Checking

Link to Original: https://qubeshub.org/qubesresources/publications/616/1

Files associated: Powerpoint (BIOMAAP\_MistakesandCheckingYourAnswers1.1.pptx) & Handout (BioMAAP\_checking\_your\_answers1.3.docx)

**Teaching Notes**

I used the handout and powerpoint as-is.

The powerpoint took about 10 minutes to go through in class. Then I had the students read the handout and practice the problems on the handout.

This was a useful activity, but I wish I had introduced it earlier in the semester (when we were doing more calculations in lab) and I wish I had the students practice checking their answers more during in-class activities.

I did include questions on the exam such as “Why is your answer to the previous question right?” and many students provided their reasoning, which I think was helpful to force them to do on the exam (though I have no concrete data that it was actually helpful).