## Teaching Notes: Introduction to Growth Mindset

### 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: **Introduction to Growth Mindset**

Link to Original: https://qubeshub.org/qubesresources/publications/619/1

Files associated: Powerpoint & Handout

**Teaching Notes**

I used the handout and powerpoint as-is.

I started by dividing the class in half. One-half of the class was assigned to come up with skills that are “innate” and the other half came up with skills that were “learned through practice.” They wrote the skills on different parts of the whiteboard, then we compared the list. There was a lot of overlap between the “innate” and “practiced” skills, which was perfect at illustrating the point that we think a lot of things are innate, but they are learned through practice.

I walked through the powerpoint and I had the students read the handout, which was overkill. Do one or the other. I also had the students complete the growth mindset activity at the end, which was useful. I did not have them do a “journal activity” for homework.

Questions on the exam revealed that most students understood the growth mindset concept and could provide examples of growth and fixed mindsets.

Occasionally in class later in the semester I would hear a student make a growth- or fixed-mindset comment and I would point it out, e.g. “Hey, that’s an excellent growth mindset!”