## Teaching Notes – Figure of the Day

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**Course Information**

Department: Biology

Course: BIOL305 Ecology

Level: **Upper Undergraduate**

Course type: **Lecture**

Students: **Majors**

Number of Students: 43

**Module Information**

Original Module Name: Figure of the Day

Link to Original: https://qubeshub.org/qubesresources/publications/618/1

**Teaching Notes**

I had not intended to use this module when I began my involvement with BIOMAAP - my original intention was to only incorporate the Growth Mindset and Math Anxiety materials, but two weeks into the term students were struggling with variable types and interpreting graphs and so I decided to jump on the FotD bandwagon.

I implemented Figure of the Day 6 times throughout the semester. Depending on the complexity of the figure, the activity took anywhere from 30-45 min to do right. I thought I could get away with only 15 min for the simple figures, but it never worked out. In order to ensure that they had enough time to brainstorm in groups and then to make sure each group got to share with the class, I really needed at least 30 min.

The time commitment was my biggest struggle with this activity... Because I hadn’t intended to implement the materials, I hadn’t adjusted my syllabus to account for the amount of time we would spend on Figure of the Day. I ended up doing 6 of them throughout my 14 week semester. If I had known I was going to need to jettison 4h+ of content, I would have modified my syllabus to cut some content early in the term, instead of desperately trying to make up for it at the end of the semester.

As hard as it was to manage the time, I would do it again. I think the students gained a lot from this activity. They all became more comfortable with explanatory/response variables, continuous/categorical variables, and the different ways that you can present information graphically. I had a figure interpretation question on the midterm and even added a question to my final exam in which I had them present their hypothesis as a figure. The majority of the class answered the question correctly (and they came up with some creative solutions!)

I do want to implement Figure of the Day in the future, but plan to make some improvements next time around. This term I selected what I thought would be the most fun and engaging figures (UFOs, breakup times, mattress size, baby names, etc) to help them get over their figure anxiety. It worked, but I wish I had created some figures that were relevant to my course content. Some of the other BIOMAAP FMN members designed figures to introduce the topics they were discussing each day. I would like to move towards this model in the future. I didn’t have time or energy to create new teaching materials this term (I had a new prep, other course restructuring, etc), but I look forward to the next opportunity. [This will also be a great place for me to contribute to the shared BIOMAAP resource repository.]

Next time I also hope to make this a weekly activity, or at least aim to do it 10 or so weeks out of the 14 week term. Now that I know how long it will take, I can incorporate it into my plan for the term. I may also be able to assign figure interpretation as a take-home assignment later in the term once they are comfortable with the process.