## Teaching Notes

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**Course Information**

Department: Biology

Level: **Lower Undergraduate**

Course type: **Lab and Lecture**

Students: **Non-majors**

Number of Students: 96

**Module Information**

Original Module Name: Figure of the Day

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

Adapted Module Name: Figure of the Day – Adapted for Non-Majors

Files associated: PowerPoint

Modification Learning Goals:

* Students will be able to identify dependent and independent variables
* Students will be able to categorize variables as discreet or continuous
* Students will recognize patterns in data
* Students will practice interpreting data using a variety of visual tools including standard variable graphs, bubble maps, scatter charts, and tables

**Teaching Notes**

* To modify this activity, I added a variety of figures that were a better fit for the content and the non-majors audience I was working with. The introductory figures included in the activity were a good start to get students talking about the graphs, but I found that using figures related to our weekly content was a good hook to get students interested in our topic of discussion.
* This was a great activity for my students, as many of them are both math and science adverse and do not have a lot of experience in data interpretation. Using these figures as a low-stakes way of introducing data interpretation skills in small groups gave them the confidence they needed to apply those skills to graded assessments, such as exams.
* The only thing that I might do differently in using this resource again would be better consistency with introducing the figures. It is not quite a daily activity, but it really could be a weekly activity during lecture. I think more consistency on my part would enhance skill development for the students.
* Finding images to incorporate was fairly straightforward. After finding an image using an online search I would open in the image in paint and edit out anything I didn’t want to the students to see in the image – a legend, a figure caption, certain variable categories, etc. I typically would prep the image as I prepared my lecture notes to make sure the image I chose was appropriate for the content for that day.
* I certainly plan to use this activity again. My next course I will use it in is an environmental biology course, so I will likely choose a different set of images.
* I recommend looking at the original “Figure of the Day” file ahead of time to make sure the images are appropriate for both your students and your course. The first time I used this resource I didn’t spend enough time looking at the images myself to make sure I could appropriately answer student questions. I think it is helpful to find the source of the image and gain some background information before sharing with the students.
* This activity fit in with my teaching goal of increasing data interpretation skills with my non-majors students. Students typically have very little experience with this, and yet we expect them to have these skills in place for our lab exercises. Working on these skills in lecture made the lab activities easier to explain and teach.