

# Show & Tell: Infographics to Keep and Sustain Engagement

Dr. Mocek

Veronica Paz and Lynnan (Evelyn) Mocek Indiana University of Pennsylvania

## Background

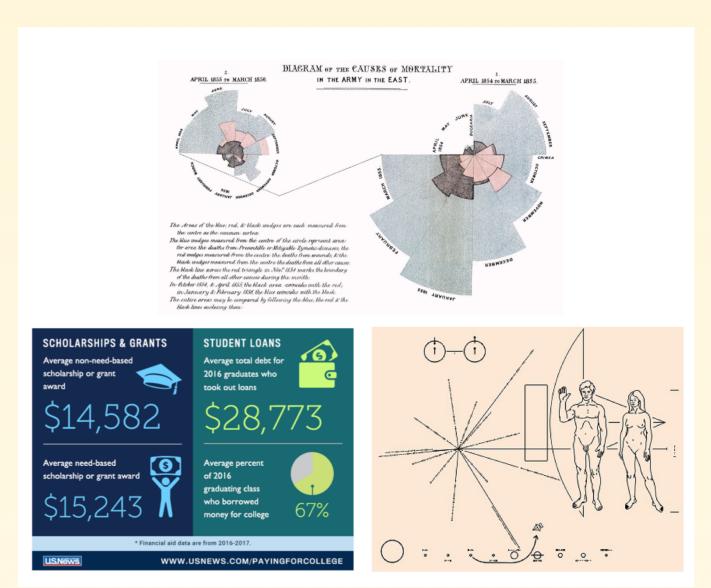
We started using Infographics as a supplement to the syllabus for 3 semesters now. The **Info Syllabus**, as we refer to the addendum displays the key information students design from the syllabus in a visual format, allowing us to engage students multimodally. We created several templates to share

## What is an Infographic?

Infographics use a visual shorthand allowing users to quickly and efficiently gain knowledge. Complex concepts are communicated fast and in an easily understood manner.

We see infographics often.

- Pioneer Plaque sent into space in 1972
- US News & World Report
- Florence Nightingale Rose, illustrated death rate of soldiers



## Considerations

- 1. Infographic should appeal to the intended audience.
- 2. Information provided in the infographic should be clear and understandable.
- 3. The design of the infographic impacts the user perception and how the user judges the information and it's usefulness.

## Theory

When considering how individuals use graphics to enhance learning a number of theories apply.

#### **Information Processing Theory**

 George Miller (1956) noted individuals can only hold 5-9 pieces of information in short term memory.

#### **Dual Coding Theory**

 Alan Pavio (2014) noted individuals receive messages for learning verbally and visually.

#### **Working Memory Theory**

 Alan Baddeley & Graham Hitch (1974) noted the focus I on the processing of verbal and visual

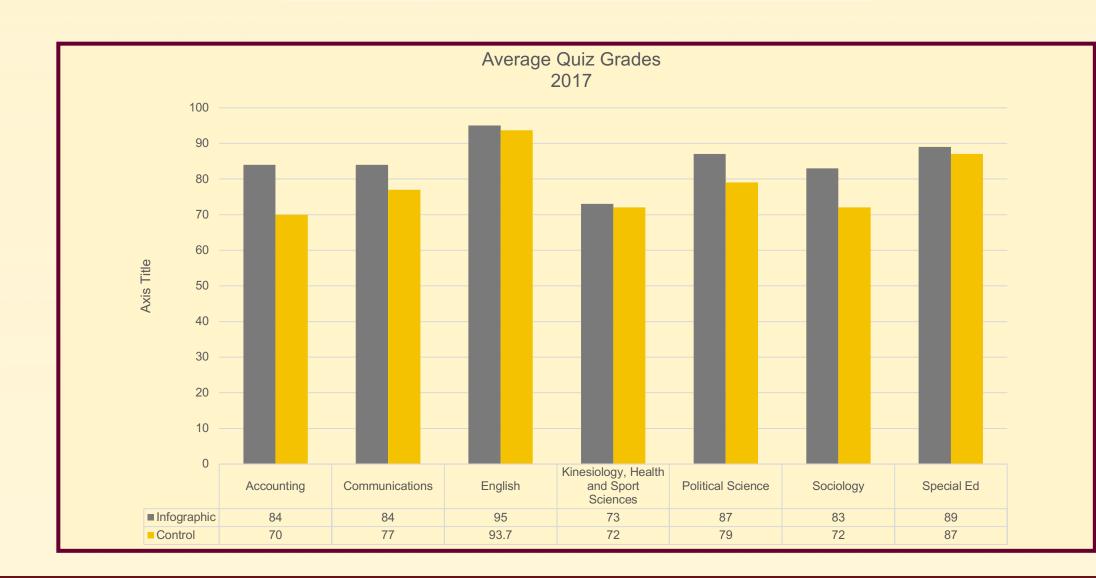
#### **Cognitive Theory of Multimedia Learning**

 Mayer (2014) determined that we learn and retain information better when words and pictures are presented together.

#### Results

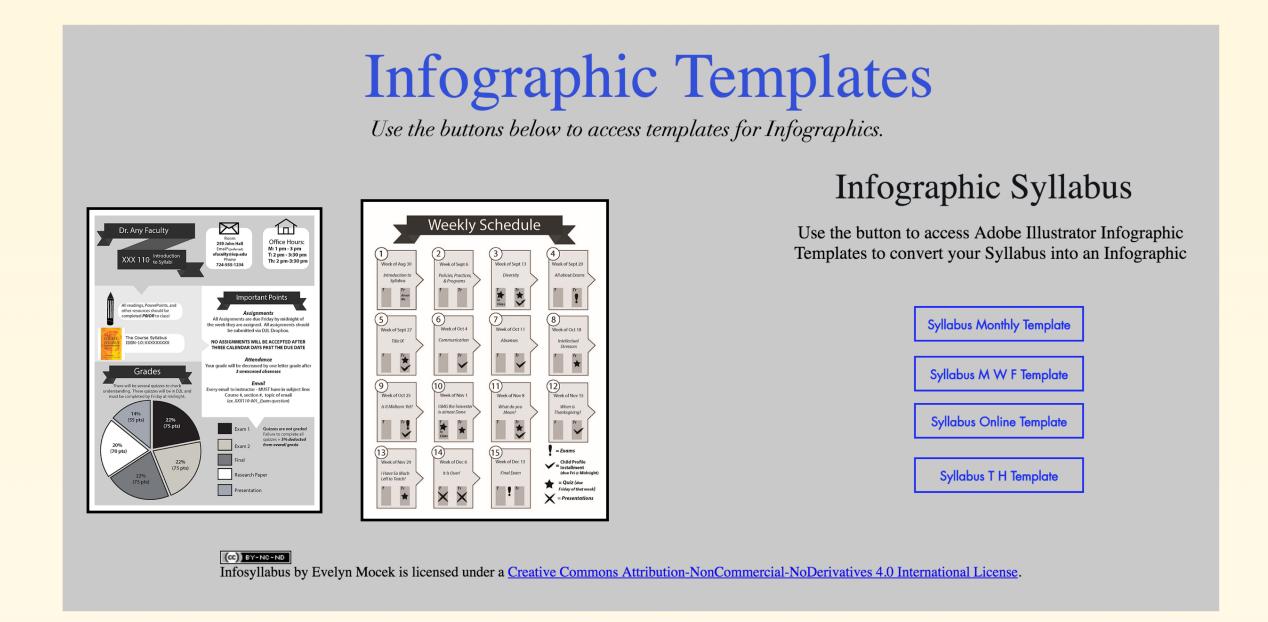
We presented one class with only the syllabus and the other class with both the syllabus and InfoSyllabus. We provided a quiz on the syllabus to gauge their retention.

## **Average Quiz Grades 2017**



## Syllabus Infographic

We decided to put these theories to the test and create a syllabus addendum in the form of an Info Syllabus. We presented the students with the syllabus and then also presented the InfoSyllabus.



Students focus on 5 items from the syllabus

- 1) Faculty Contact Information
- 2) Materials required (textbooks, etc.)
- 3) Points towards final grade
- 4) Grade Calculation and
- 5) Class Calendar (due dates)

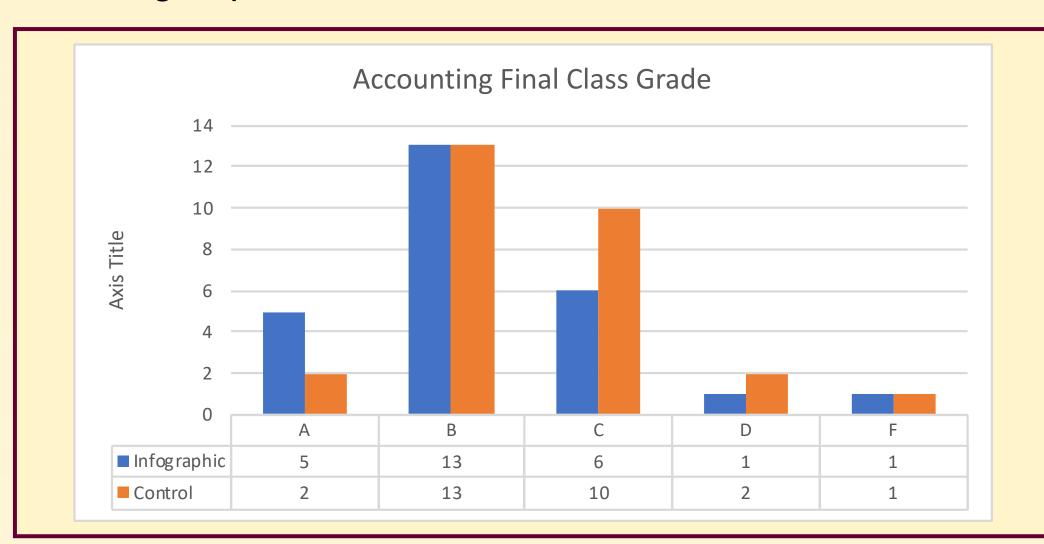
The InfoSyllabus also focuses on these elements of the syllabus.

All of the syllabus templates are provided at www.AccountingTeachingTools.com.

You may access all templates and modify for your courses. The files are adobe illustrator files, requiring on average 1-2 hours to complete the first time.

## Conclusion

The study also demonstrates the group with the InfoSyllabus earned a few more A final grades than the control group.



We currently in another phase of the experiment with the accounting courses. We are also utilizing the InfoSyllabus template in other courses outside of the college of business.

## Access Syllabus Infographic Templates

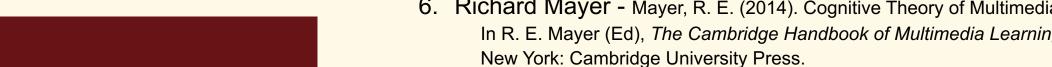
Our webpage www.AccountingTeahcingTools.com houses all of the Adobe Illustrator Syllabus Infographic Templates for your use via a Creative Commons license.

We provide several class formats, such as class meetings 3 times a week, 2 times a week, online or hybrid.

### References

- 1. Pioneer Plaque Sagan, C., Sagan L.S., & Drake, F. (1972). A Message from Earth. Science, 175,4024, 881-884. DOI: 10.1126/science.175.4024.881
- 2. Rose Diagram Nightingale, F. (1858). Notes on Matters Affecting the Health, Efficiency, and Hospital Administration of the British Army. Founded Chiefly on the Experience of the Late War. Presented by Request to the Secretary of State for War.
- 3. George Miller Miller, G. A. (1956). The magical number seven, plus or minus two. Some limits on our capacity for processing information. Psychological Review 63(2), 81-97.
- 4. Alan Pavio Paivio, A. (2014). Intelligence, dual coding theory and the brain. *Intelligence*,
- 5. Baddeley & Hitch Baddeley, A. D., & Hitch, G. (1974). Working Memory. Psychology of Learning and Motivation, 8, 47-89. https://doi.org/10.1016/S0079-7421(08)60452-1
- 6. Richard Mayer Mayer, R. E. (2014). Cognitive Theory of Multimedia Learning. In R. E. Mayer (Ed), The Cambridge Handbook of Multimedia Learning (pp. 43-71).





Authors ORCID QR Codes

Visit <a href="https://www.AccountingTeachingTools.com">www.AccountingTeachingTools.com</a> to access the Infographic templates.