Elizabethtown College

JayScholar

Summer Scholarship, Creative Arts and Research Projects (SCARP)

Programs and Events

Summer 2020

Using Art to Study Science: Assessment of Creative Assignments in Student Success

Rebecca Kruse Elizabethtown College, kruser@etown.edu

Follow this and additional works at: https://jayscholar.etown.edu/scarp

Part of the Anatomy Commons

Recommended Citation

Kruse, Rebecca, "Using Art to Study Science: Assessment of Creative Assignments in Student Success" (2020). *Summer Scholarship, Creative Arts and Research Projects (SCARP)*. 11. https://jayscholar.etown.edu/scarp/11

This Presentation is brought to you for free and open access by the Programs and Events at JayScholar. It has been accepted for inclusion in Summer Scholarship, Creative Arts and Research Projects (SCARP) by an authorized administrator of JayScholar. For more information, please contact kralls@etown.edu.



Using art to study science: assessment of creative assignments in student success

REBECCA KRUSE DR. ANYA GOLDINA CAROL COSTA OUIMET

How it all started...

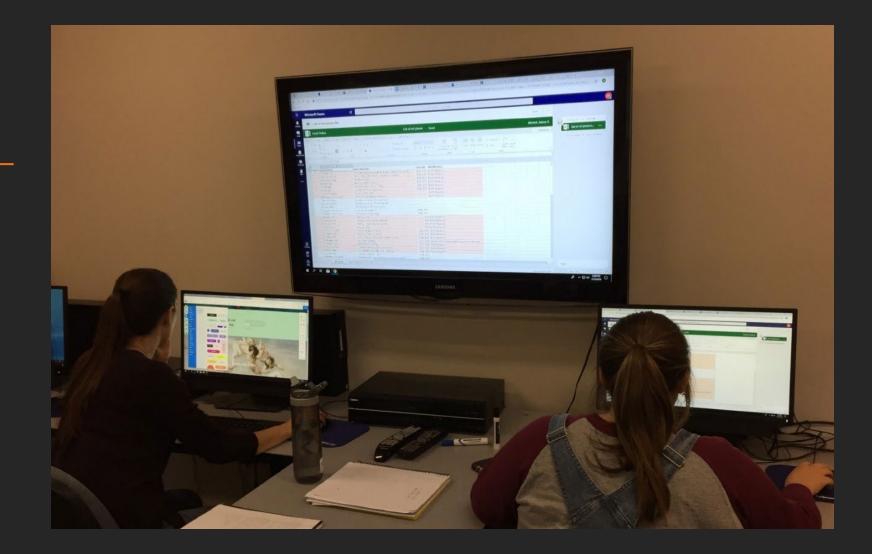


Extra Credit Project (ECP):

- Students may complete 1 project from each category
 - Category 1 reflective/analytical
 - Review of current A&P research
 - Myth buster
 - Personal reflection
 - Category 2 creative
 - Children's story book / poems
 - Artistic creation
 - Musical piece (song, dance, skit)

SCARP 1 2019

- Catalog and digitize artwork
- Create a platform to display artwork
- Show physical items to the public



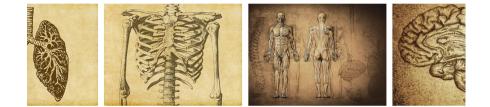
SCARP 2 2020

- Create and send survey
- Collect and analyze results
- Edit and update website
- Catalog more art





Choose a system to explore the collection!

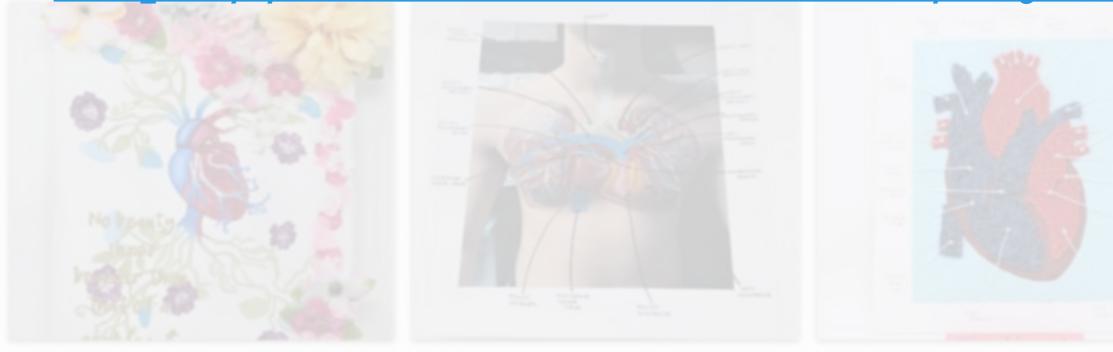


Website Design

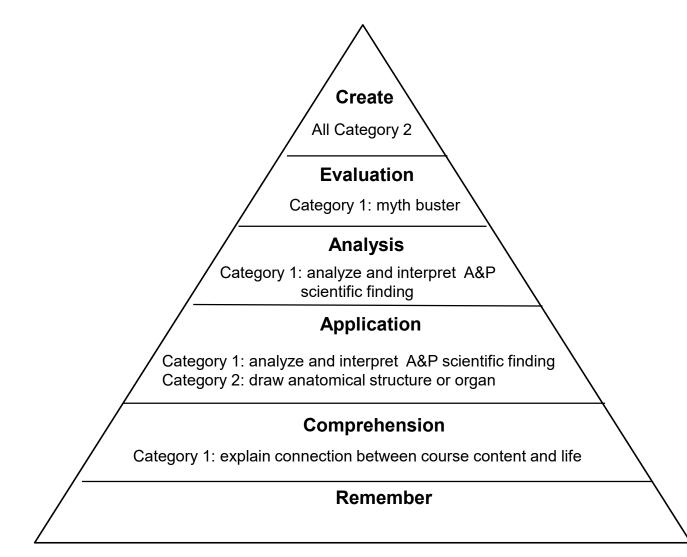
- Using WIX for site development
- Available resources
- Future developments

HOME is where the HEART IS

https://kruser68.wixsite.com/mysite



According to Dr. Goldina



Do students feel the same way?

(i.e. Is Dr. Goldina off?)

Surveying Students



Alumni Association

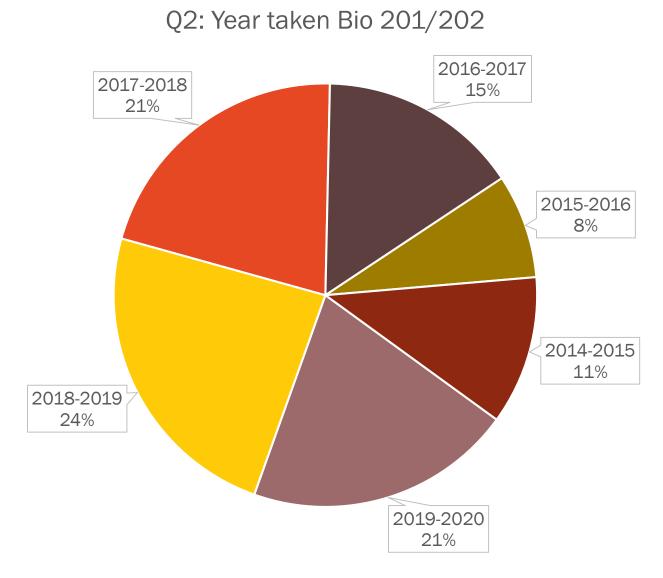
2 parts and 1,000,000 details

CREATING THE SURVEY

- Main ideas to convey
- Wording
- Formatting
- Legal disclosure
- IRB approval

GATHERING RESPONSES

- Spreadsheet format
- New answers
- Sending and resending
- Graphing



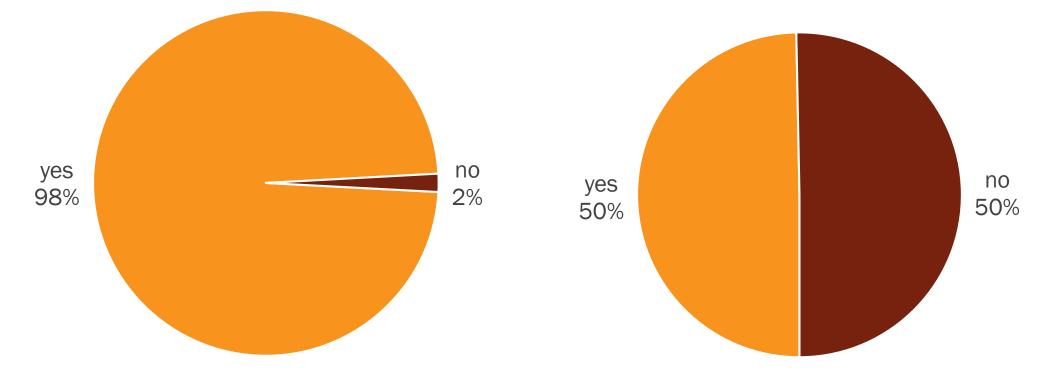
Responders by year

Findings

1.Most students complete the extra credit project

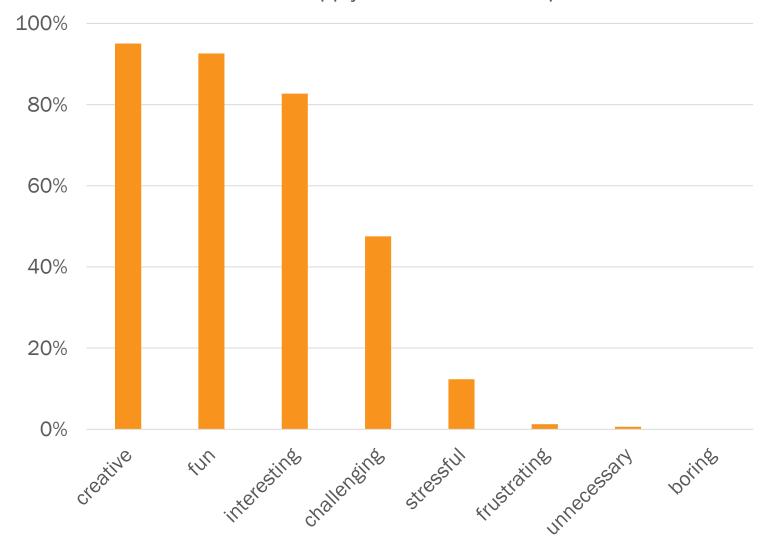
Did you complete the extra credit project?

Did you have any background in art/dance/music/craft that helped you complete your extra credit project?



1. Student complete ECP

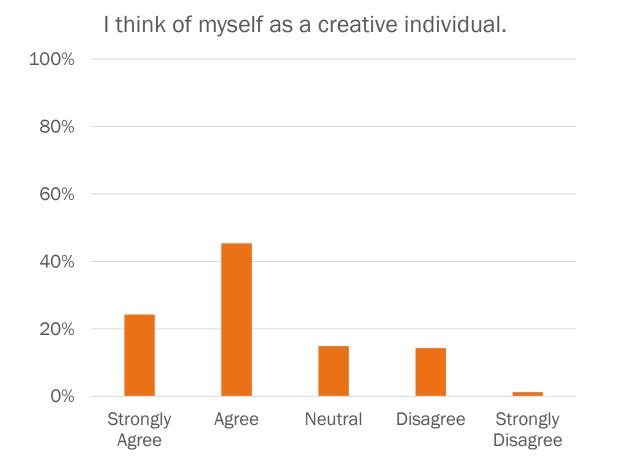
2. Extra credit project increased student enjoyment of the course



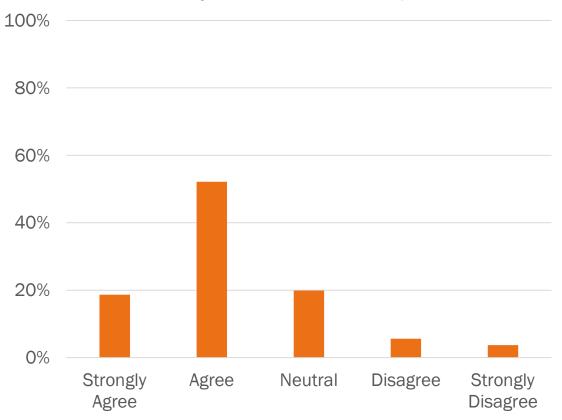
Please select all that apply: The extra credit options were...

2. ECP increased student enjoyment

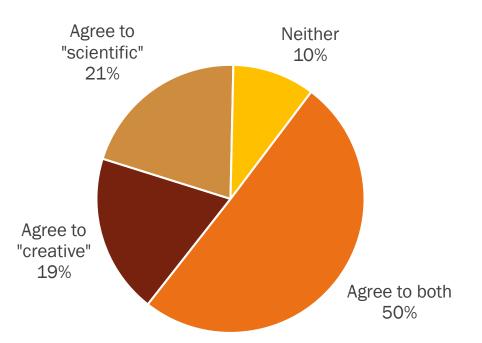
3. The project inspires students to connect art and science.



I think of myself as a "science" person.

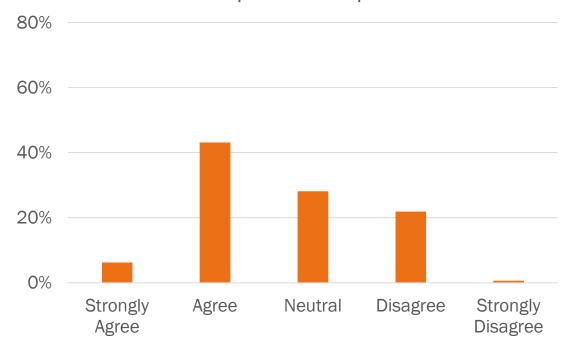


3. ECP inspires students to connect art and science



What percentage of students think they are artistic, creative, both, or neither?

Applying my creative abilities to a science concept was unexpected.



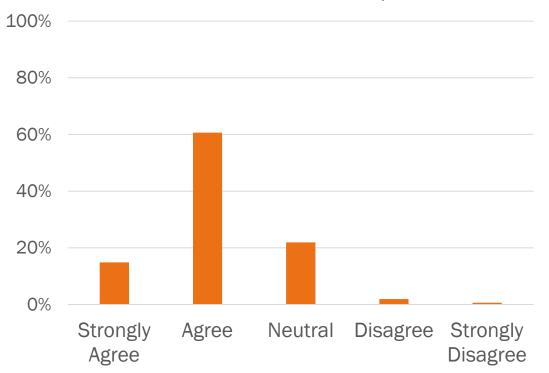
3. ECP inspires students to connect art and science



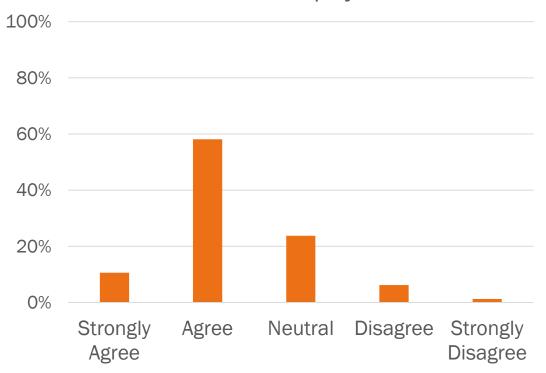
Responder 20: "When you have to take a hard-to-understand concept and apply it to something seemingly unrelated, like art, it helps you form connections and understand that concept better."

4. The project influenced student learning

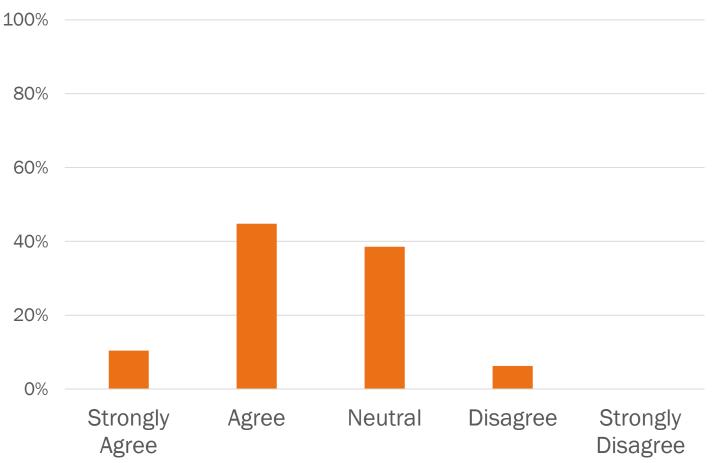
I feel that completing this project made me understand the scientific concepts better.



I recognized my potential to understand sophisticated scientific concepts through the extra credit project.



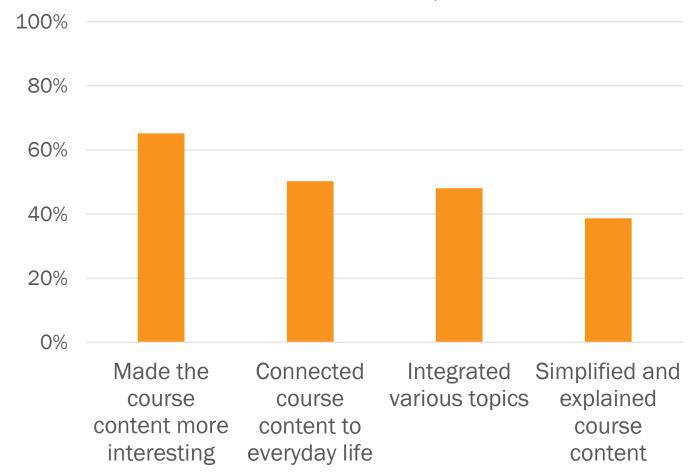
Completing the extra credit project made me think about the material differently.



Responder 67: "The creativity behind the extra credit assignment allows a person to develop their own understanding of the topic because they have to view it through a different mindset".

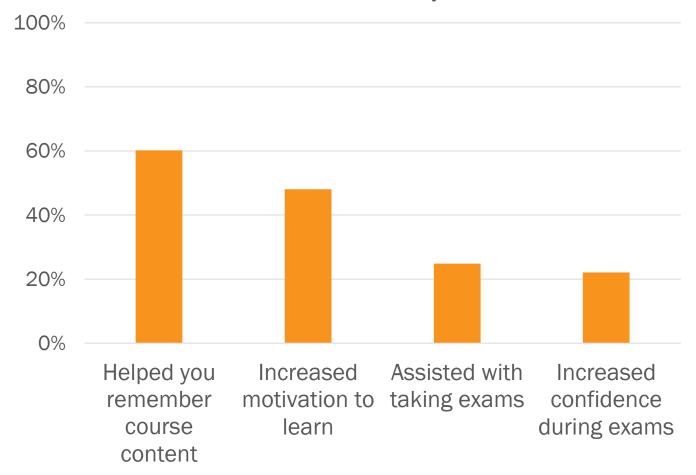
Responder 116: "I was able to understand the concepts thoroughly while also using the fun, enjoyable, and creative aspects to view the information with a different and more educated perspective."

With regards to course content, did you feel that the extra credit activity:



With regards to course content, did you feel that the extra credit activity:

Responder 16: "I can look back on and know that it is engrained in my memory because I took extra time and care to complete it".



STEM to STEAM

Science | Technology | Engineering | [+ART] | Mathematics

The "A" in STEAM

 Responder 35: "Transferring what we learned in a science aspect to a more artistic aspect helped me understand how beautiful the human body can be".

 Responder 142: "Creating something with my own hands activated other parts of my mind and interwove them together. It really helped me connect more to the course,"



Summary

- 1. Most students complete the extra credit project
- 2. Extra credit project increased student enjoyment of the course
- 3. The project inspires students to connect art and science.
- 4. The project influenced student learning
- 5. (Bonus) Dr. Goldina is not completely off her rocker



Future Studies

- Application in students' careers
- Analysis of open-ended questions
- Publishing and presenting current findings
- Continuing website improvements and accessibility
- Developing marketing strategy



Thank you!