## Improving CS Outreach Events in the A/synchronous Era

The Artful Craft of Science (TACoS) – Computer Science 2020-2022

# Summer 2022

#### Team Members







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#### Problem Statement

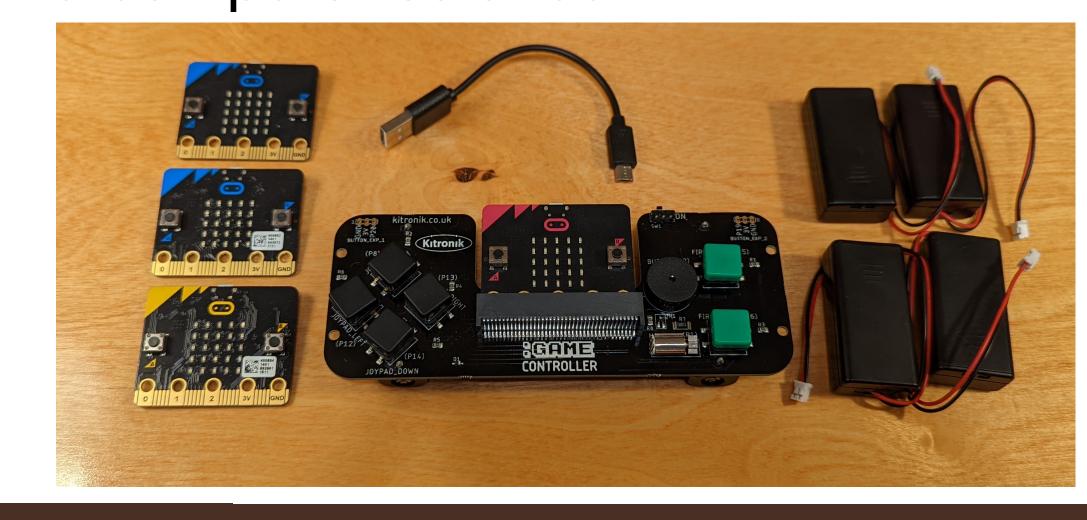
- How does video quality and video length (one long video vs. multiple short videos) impact student participation and engagement?
- How does length of time that content is accessible affect how students engage with course material?



## Background

The Artful Craft of Science (TACoS) is a

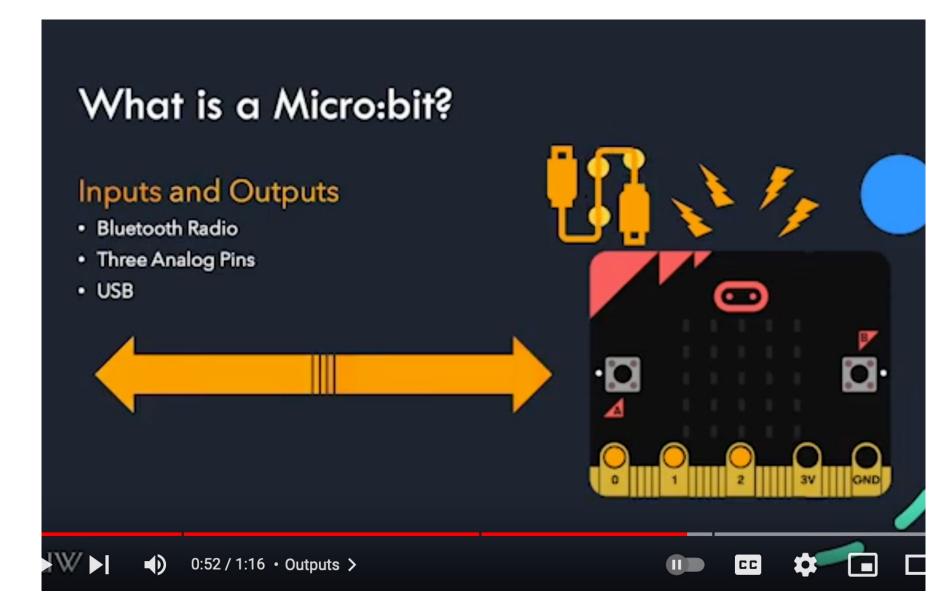
- One-week camp for upcoming 5<sup>th</sup> and 6<sup>th</sup> graders put on by UW
- Highlights connections between art and science
- TACoS 2022 included four separate fiveday courses in art, chemistry, microbes, and computer science.

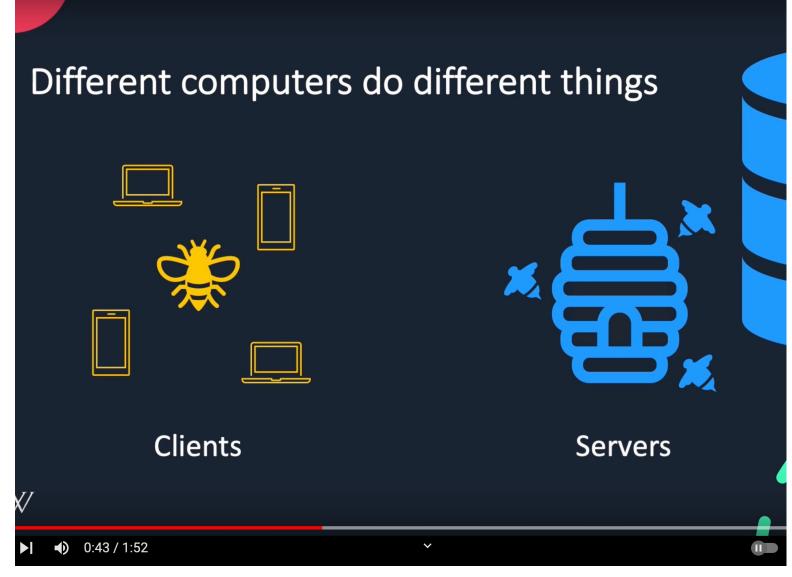


### Methods

Content creation was two-fold:

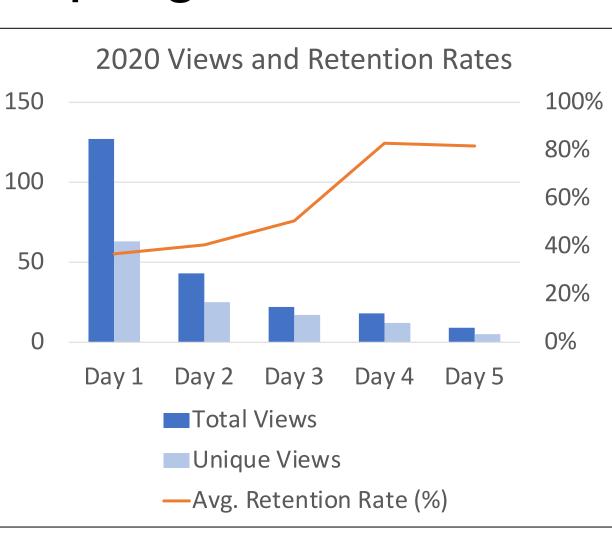
- 1. Develop multidisciplinary activities that fostered a holistic understanding and encouraged collaboration
- 2. Present the material in an engaging way for virtual and in-person attendees

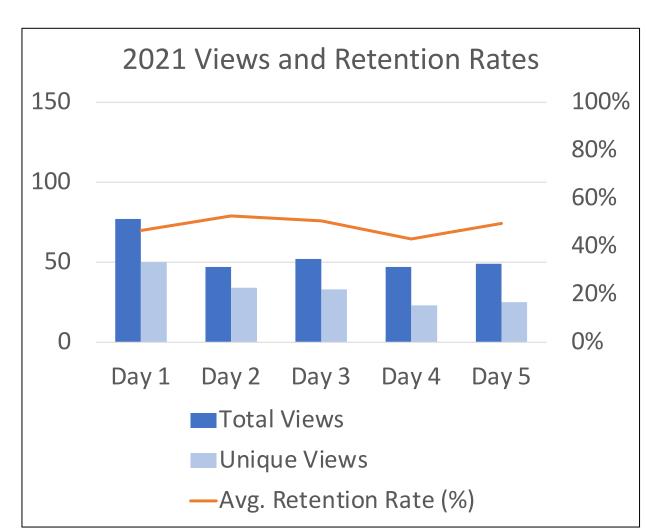




#### Results

- Improved video quality between 2020 and 2021 may have encouraged more participation, increased retention, and higher student engagement in 2021
- Qualitative analysis for 2022 videos is in progress.

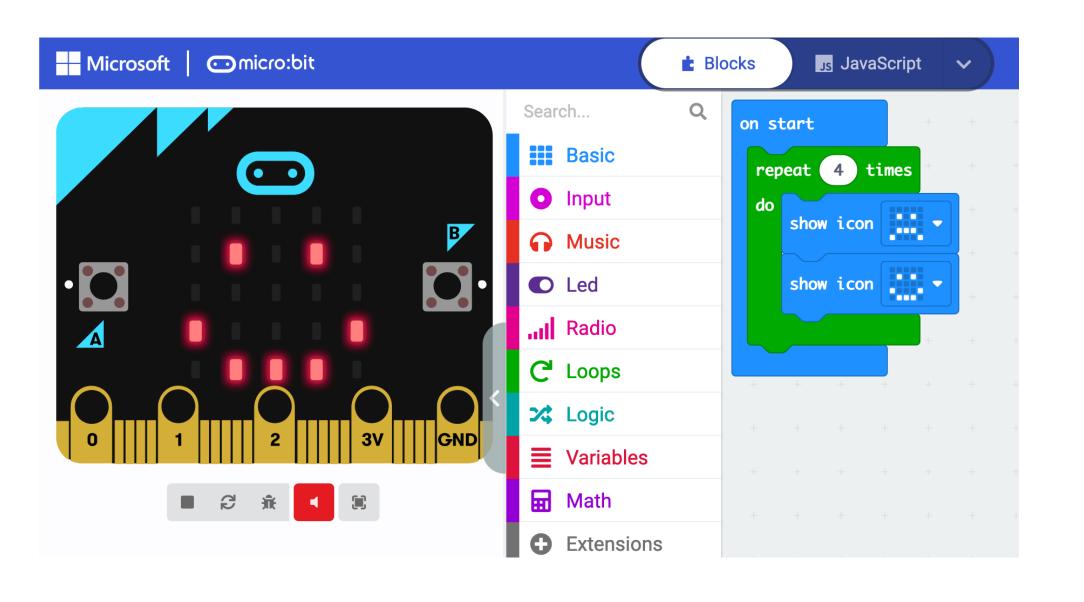




## Challenges & Future Work

Future work includes:

- Compare 2020 & 2021 data with viewership data from 2022
- Adapt content for future TACoS camps
- Generalize lesson plans & create templates for K-12 educators to use in class





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