Well-known, 200-year-old, small, liberal arts school

- No online education experience, but not behind in digital pedagogy practices
- Forced to adapt to remote education needs of students/faculty during COVID
  - All while undergoing a radical re-imagining of its courses
Introduction

Strategic approach to designing and delivering remote education during COVID-19

Case study of the use of Perusall, a digital annotation tool - 2020-2021 academic year

Perusall
Five Key Dimensions

1. Reimagining teaching and learning needs
2. Rapid launching of new digital platforms
3. Adopting digital pedagogy practices for HyFlex contexts
4. Developing a faculty learning community through faculty examples
5. Acknowledging issues of inequity and striving for inclusive approaches
Dimension 1

Reimagining Teaching and Learning Needs
Dimension 1 - Reimagining Teaching and Learning Needs

● Six-week summer 2020 education development program - by ATS, CTL, CCE
  ○ 80% faculty participation
  ○ First time in the recent history of the institution
● Integrated an “Online Course Design” microcredential by the Association of College and University Educators
● Encouraged faculty to develop strategies for building online learning communities through transparency and inclusivity
Rapid Launching of New Digital Platforms
Dimension 2 - Rapid Launching of New Digital Platforms

- Digital annotation tools -
  - Pinpointed platforms as critical to reimagining close colloquy for the remote context
  - Academic Technology Services (ATS) unit began to research and implement various platforms
  - ATS developed resources to support faculty who were interested in using selected platforms
  - Partnered with 2U an Online Program Manager to design and deliver 20% of the courses
Dimension 2 - Rapid Launching of New Digital Platforms

Perusall

- Annotating texts
- Fostering critical reading
- Increasing student engagement
- Promoting inquiry-based learning
- Facilitating peer learning
- Building community
- Integrated with Moodle LMS
Other Annotation Tools in Use

**VideoAnt** - asynchronous video annotation

**Zoom** - annotation of documents or images during synchronous sessions

**Google Drive/Docs** - collaborative work and annotation of PDFs and Docs (both synchronously and asynchronously)
Dimension 3

Adopting Digital Pedagogy Practices for HyFlex Contexts
Dimension 3 - Adopting Digital Pedagogy Practices for HyFlex Contexts

● Paradigm shift in pedagogical design for small seminar classes
  ○ Many adopted a HyFlex model

● New forms of engagement
  ○ Promote a reading & learning community including both in-person and remote students
Dimension 3 - Adopting Digital Pedagogy Practices for HyFlex Contexts

- Goal of creating student connections and continuity between synchronous and asynchronous activities

- Perusall was particularly effective for asynchronous collaboration
Dimension 4

Developing a Faculty Learning Community
Dimension 4 - Developing a Faculty Learning Community

Faculty innovations were captured in a series of articles to strengthen the faculty learning community.
Dimension 4 - Developing a Faculty Learning Community

● “Academic Technology in Action” project
  ○ www.amherst.edu/go/ata
  ○ Continues to grow as more faculty reflect on their experiences with tools over the past year
  ○ Some articles were supplemented with virtual faculty sharing sessions, allowing for greater exchange of ideas
  ○ Articles and sharing sessions were publicized to the faculty, to assist in building a larger faculty learning community
  ○ Documents a wide variety of teaching approaches
Dimension 4 - Developing a Faculty Learning Community

- “Digital Annotation and Collaborative Analysis using Perusall”
  - Focused on seven different strategies for using the Perusall platform, demonstrating the diversity of applications that it can provide, including:
    - Integration of digital media in student annotations
    - Use of emojis to encourage participation
    - Inquiry-based learning using questions
    - Peer learning using groups
Dimension 4 - Developing a Faculty Learning Community

Prof. Rhonda Cobham-Sander
Black Studies and English
Dimension 4 - Developing a Faculty Learning Community

Prof. Catherine Infante
Spanish
I'm still trying to grasp this concept and also wondering where it fits into astronomy. What constitutes an inhomogeneous medium, and are stars or any other objects treated as coherent sources?

If my understanding is correct, inhomogeneous media refer to those media in which the refraction index $n$ is not constant all throughout, but rather varies with coordinates. Apparently starlight can be treated as 'spatially and temporally coherent in that the subset of starlight arriving on earth has such a small angular distance compared to how far away it originated from,' although I am not entirely sure exactly how that fact explains the coherence.

I don't think starlight would strictly considered coherent: for one, because coherence only really makes sense for photons of the same wavelength (since it is a measure of how well their crests and troughs line up, and for light of different wavelengths these will always diverge after some number of cycles), and stars emit over a range of wavelengths that make up their blackbody curve, the concept doesn't really apply. Even if you only consider a narrow range of wavelengths, though, they likely wouldn't be very coherent— if they were, we wouldn't need lasers, since we could just heat objects up and pass their light through a small hole and cover it with a filter or two. There are a few natural lasers (here's a video on the subject), but otherwise most astronomical objects will not emit very coherent light.
Dimension 4 - Developing a Faculty Learning Community

- **Challenge:**
  Auto-grading, an Artificial Intelligence feature

- Experimental feature
- Used for participation
  - (even a low score received full credit)

- Students identified issues with the results of the auto-grading
- Inaccurate grades may negatively impact student motivation
Dimension 5

Striving for Inclusive Approaches
Dimension 5 - Striving for Inclusive Approaches

- Greatest challenge to higher education during COVID-19 was providing equitable learning experiences

- Greater faculty use of digital materials
  - Increased access to learning materials for all students
  - Reduced accommodation requests for alternative textbook options
Dimension 5 - Striving for Inclusive Approaches

- Optical Character Recognition (OCR) optimized readings
  - Created by Amherst College Library staff
  - More accessible for assistive technologies, such as screen readers
  - Contributed significantly toward college’s goal of providing equitable learning experiences
Dimension 5 - Striving for Inclusive Approaches

● Challenge:
  ○ eBooks available through the Library were not always usable with Perusall due to Digital Right Management (DRM) issues
Dimension 5 - Striving for Inclusive Approaches

● Some of Perusall’s built-in accessibility features:
  ○ Text-to-speech
  ○ Resizable and responsive user interface
  ○ Increased color contrast options
  ○ Open Dyslexic font option
Conclusion

How ATS work contributes to:

• Developing and sustaining a culture of experimentation in teaching and learning
• Curating digital pedagogy practices through evidence-based methods
• Showcasing effective practices from the Amherst college classroom
Thank You for Attending

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ats@amherst.edu
www.amherst.edu/go/ats
Evaluate Sessions and Win!

- Navigate to specific session to evaluate
- Select “Evaluate Session” on session details screen
  - Complete session evaluation*

*Each session evaluation completed (limited to one per person per session) = one contest entry. **Five (5) $25 gift cards** will be awarded