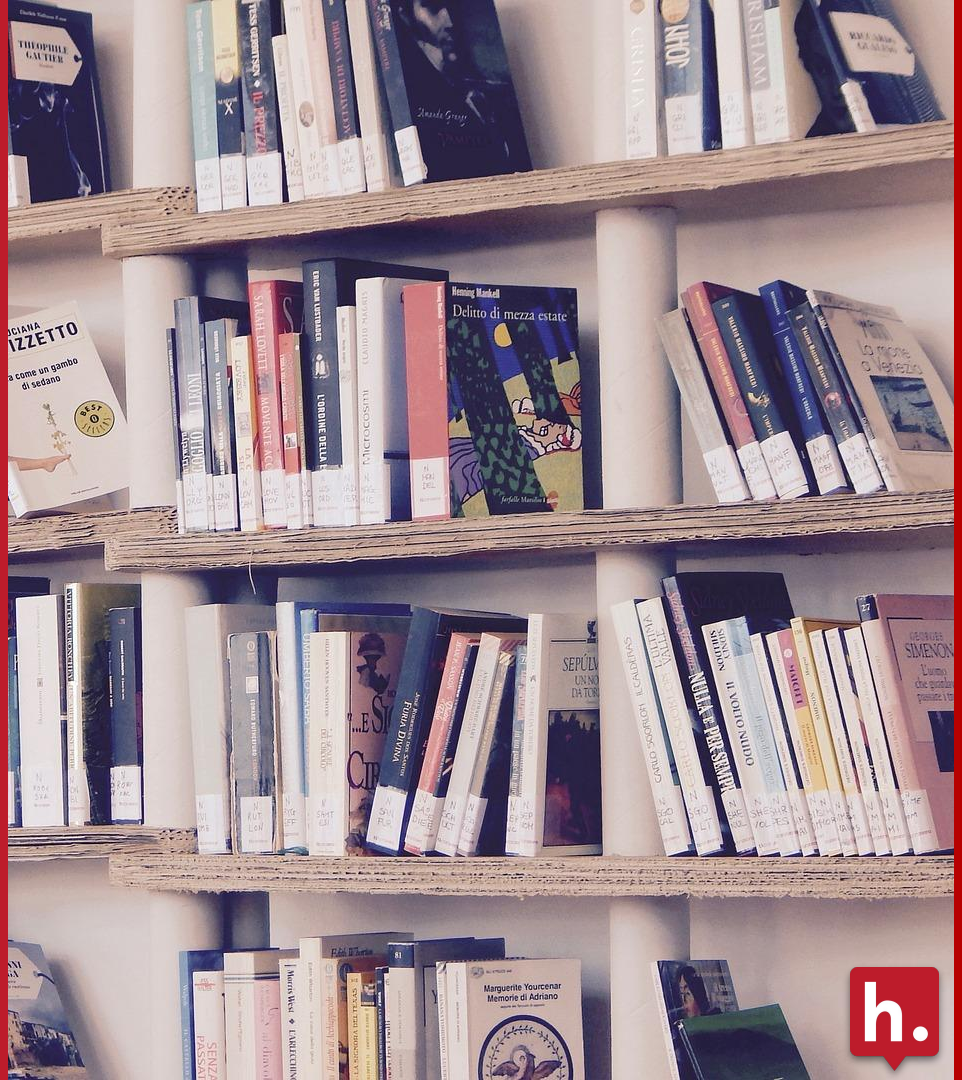
Hypothesis multimedia features: Incorporating UDL into your course

Hypothesis Workshop

https://bit.ly/lpchypf23

Agenda

1. Discuss: What is social annotation? What is UDL?
2. Review how social annotation can help meet the principles of UDL
3. Assignment examples
4. Demo
5. Discussion/Q&A



Introductions

Name, Discipline, Experience with Hypothesis

Find us on Twitter @hypothes_is #socialannotation

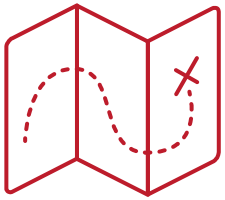
hypothes.is

Your Hypothesis Team

Christie DeCarolis

Customer Success Manager
& Instructional Designer

Hypothesis in Teaching & Learning



What does it look like to annotate with Hypothesis?

Hypothesis makes reading

Active

“I want students to learn the profits and pleasures of careful, engaged reading... Hypothesis finally delivers on the promise of digital annotation.”

Lawrence Hanley, Professor, Department of English, San Francisco State University

Visible

"Their annotations give me a window to their thoughts and understandings that I couldn't access otherwise... I wouldn’t get this depth of interaction in a threaded discussion.”

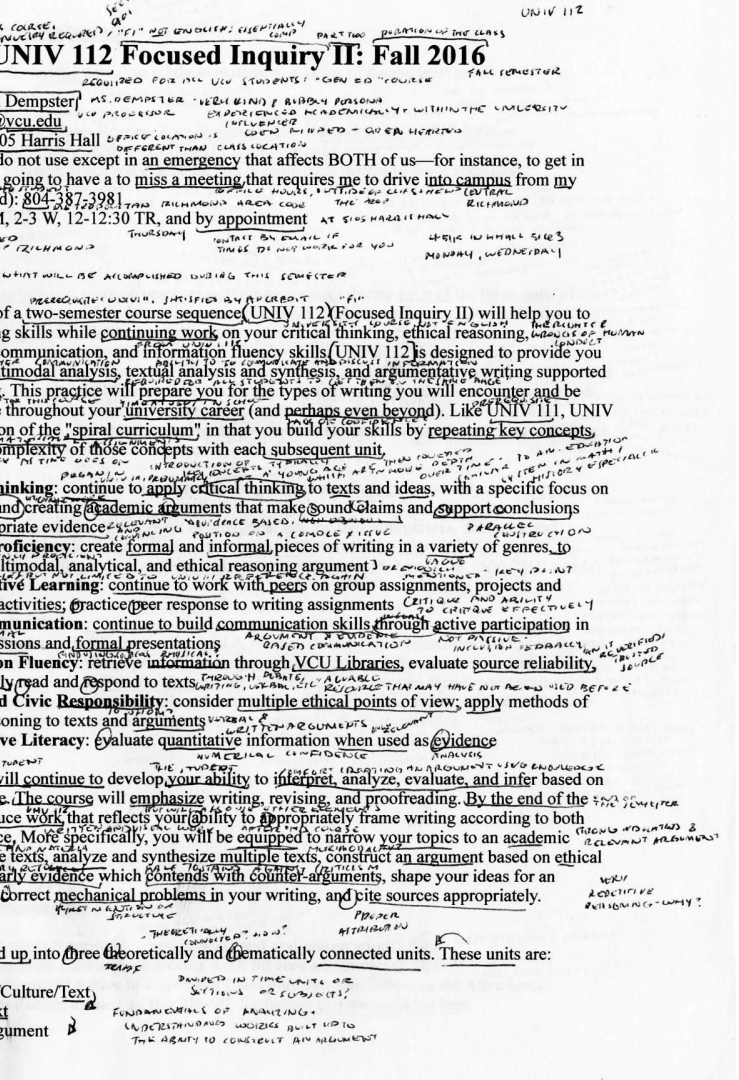
Linda Parsons, Associate Professor, The Ohio State University

Social

"Hypothesis is my literary Facebook. When I’m reading I sometimes wonder, does anyone actually understand this? Am I crazy? With this brilliant tool I know I’m not alone.”

Shannon Griffiths, Student, Plymouth State University

Hypothesis in the Classroom



UNIV 112 Focused Inquiry II: Fall 2016

Dempster
@vcu.edu
05 Harris Hall
do not use except in an emergency that affects BOTH of us—for instance, to get in
going to have a to miss a meeting that requires me to drive into campus from my
d): 804-387-3981
1, 2-3 W, 12-12:30 TR, and by appointment

of a two-semester course sequence (UNIV 112) (Focused Inquiry II) will help you to
g skills while continuing work on your critical thinking, ethical reasoning,
ommunication, and information fluency skills. UNIV 112 is designed to provide you
ltimodal analysis, textual analysis and synthesis, and argumentative writing supported
. This practice will prepare you for the types of writing you will encounter and be
throughout your university career (and perhaps even beyond). Like UNIV 111, UNIV
on of the "spiral curriculum," in that you build your skills by repeating key concepts,
mplexity of those concepts with each subsequent unit.

hinking: continue to apply critical thinking to texts and ideas, with a specific focus on
nd creating academic arguments that make sound claims and support conclusions
priate evidence
roficiency: create formal and informal pieces of writing in a variety of genres, to
ltimodal, analytical, and ethical reasoning argument
ive Learning: continue to work with peers on group assignments, projects and
activities; practice peer response to writing assignments
munication: continue to build communication skills through active participation in
ssions and formal presentations
on Fluency: retrieve information through VCU Libraries, evaluate source reliability,
ly read and respond to texts
d Civic Responsibility: consider multiple ethical points of view; apply methods of
oning to texts and arguments
ve Literacy: evaluate quantitative information when used as evidence

vill continue to develop your ability to interpret, analyze, evaluate, and infer based on
e. The course will emphasize writing, revising, and proofreading. By the end of the
uce work that reflects your ability to appropriately frame writing according to both
ce, More specifically, you will be equipped to narrow your topics to an academic
e texts, analyze and synthesize multiple texts, construct an argument based on ethical
arly evidence which contends with counter-arguments, shape your ideas for an
correct mechanical problems in your writing, and cite sources appropriately.

d up into three theoretically and thematically connected units. These units are:

Culture/Text
xt
gument

Start by annotating the syllabus.

Set expectations.

Provide space for questions.

Practice annotating.

Annotate lectures or additional course videos.

Connect video to text.

Provide another means of representation.

Add interaction to video.

Open the reading for a seminar-style discussion online.

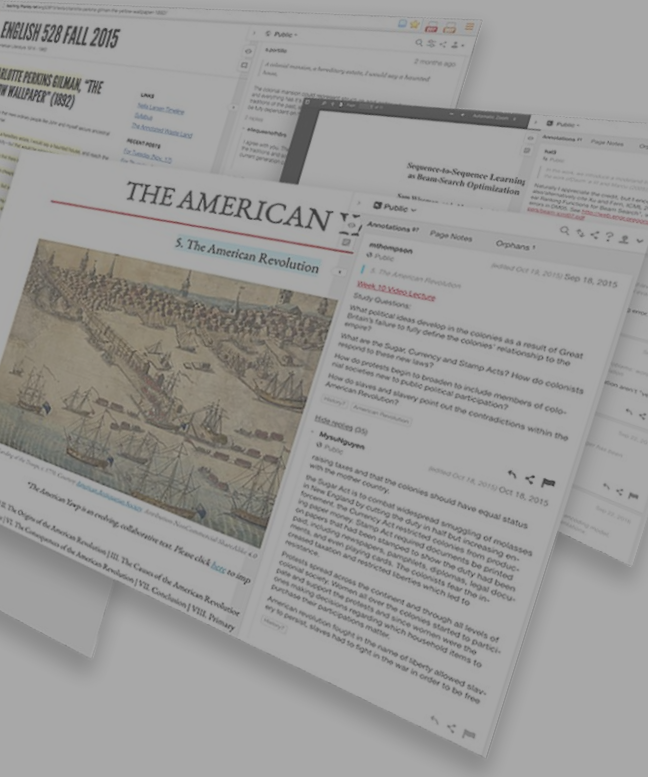
Create discussion threads.

Anchor the conversation in text.

Have students annotate your course documents.

Provide space for questions.

Clarify course concepts.

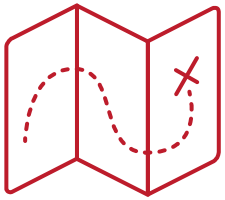


Hypothesis Starter Assignments

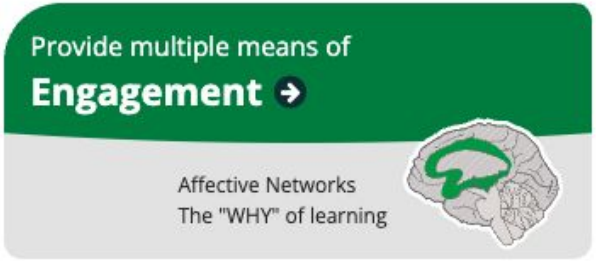
Assignment instructions that are ready to use or adapt in your courses

- Annotation starter assignments
  - Some examples:
    - General annotation assignment
    - YouTube video annotation starter assignment
    - Annotation assignment for STEM texts

What is UDL?



How can Hypothesis help?



Offer multiple types of opportunities to engage in the course.

What will motivate and engage my students?

Goals:

- Create value and authenticity
- Vary demands to optimize challenge
- Foster community
- Develop self-assessment and reflection

Hypothesis offers...

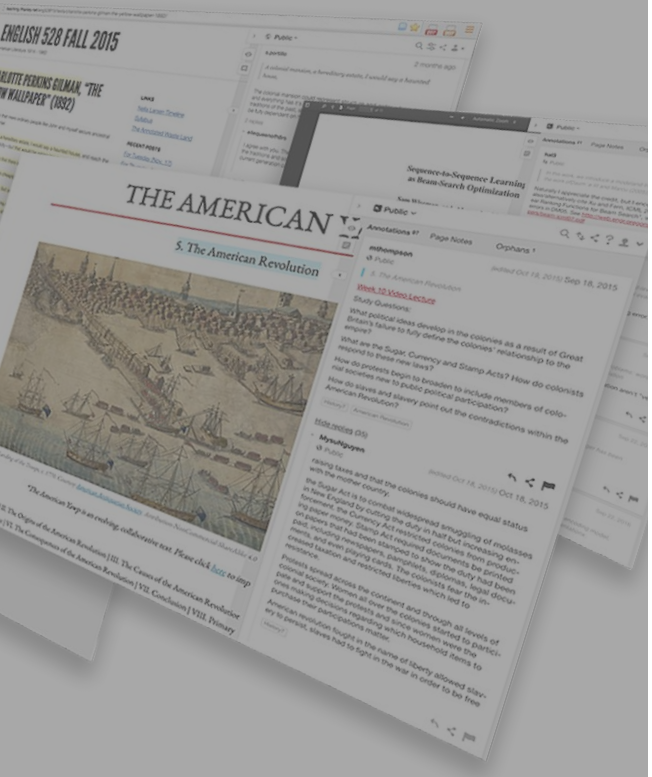
✅ An alternative way to engage

✅ A method of community-building

✅ An explicit time for students to practice metacognition

✅ A formative assessment strategy

✅ An opportunity for students to to see themselves as knowledge creators



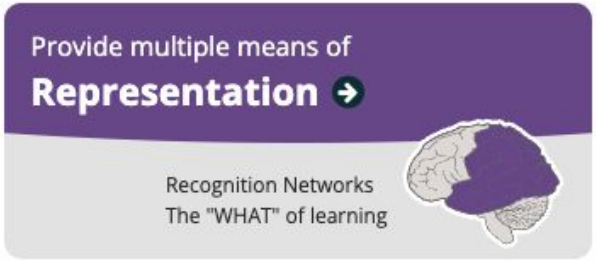
Social annotation to support neurodivergent learners

- Offers instructors a method for incorporating UDL into their courses
- Hypothesis' features allow students to choose *when* and *how* to engage in a way that best works for them

Examples of controlling distractions:

Hide/reveal highlights with the eye icon:

Choose when to load new annotations:



Offer different types of course materials for your students to consume.

How will my students best learn a concept or topic?

Goals:

- Clarify jargon and syntax
- Offer alternatives to text (audio, images, video)
- Offer alternatives to visual information (text, audio)
- Highlight patterns

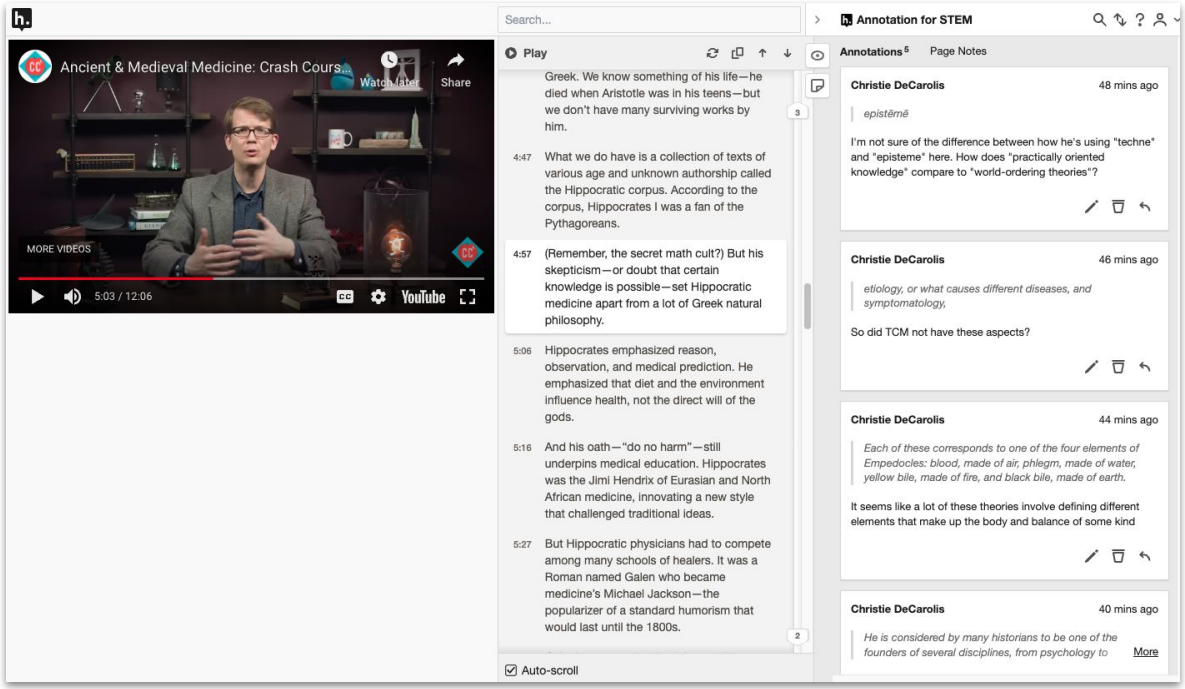
Hypothesis offers...

✅ Multimedia options in both **what** you annotate and **how** you annotate

✅ Clarification of vocabulary and concepts anchored within the text

✅ A way to guide the students through readings, highlighting key concepts and patterns

Bring in multiple means of representation with our YouTube and JSTOR integrations



- YouTube instructions
- JSTOR instructions

… and by annotating with images and video

Jennifer Graham Oct 22, 2022

> *n other words, this is aconservation law*

so the Law of Conservation of Momentum means that the total momentum of the objects is equal before and after impact (as long as nothing else is interacting with them)

Hide replies (3)

Malika Stone *(edited)* Oct 22, 2022

yes, I found this video demonstration to be helpful to show the transfer of momentum between pool balls

Jennifer Graham Oct 22, 2022

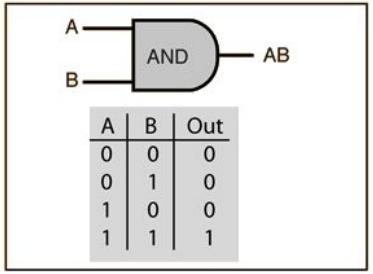
> *And so our perceptron implements a NAND gate*

I'm having trouble understanding the NAND gate.
I read more about it on this website and it seems like all of the AND/OR/NAND examples demonstrate that there's only one combination of 0 & 1 inputs that will equate either a negative or positive (the opposite of all the other outputs in this perceptron example).

Hide replies (1)

Malika Stone Oct 22, 2022

It makes more sense if you just look at it as the opposite of the AND one.

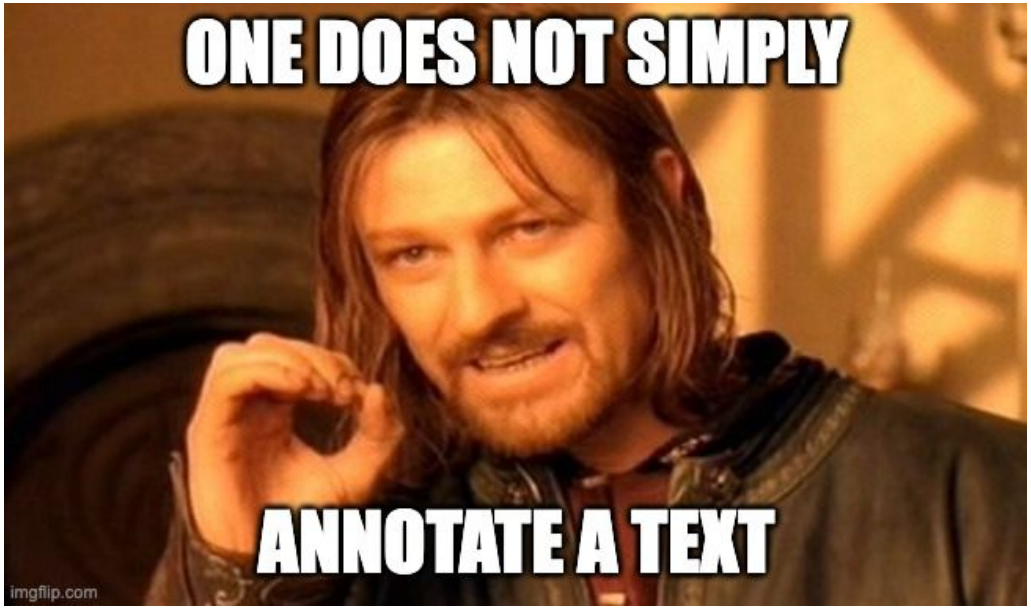


A	B	Out
0	0	0
0	1	0
1	0	0
1	1	1

In the AND example, both of the inputs need to be 1 for it output 1. In NAND both of the inputs need to be 1 to output < 0. I think the NAND has a smaller bias here.

Help docs on adding links/images and adding videos to annotations

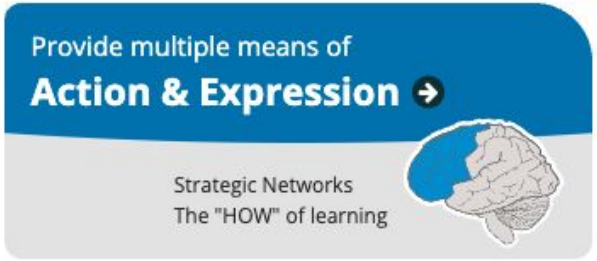
Get creative with multimedia annotations



Ask students to create memes and add them to annotations

Use the emoji keyboard to add emoji to annotations

🤓 □



Offer varying types of assignments through which learners will be assessed.

How can my students best express what they know?

Goals:

- Provide scaffolding to support performance
- Use multiple tools for construction & composition
- Facilitate managing information & resources

Hypothesis offers...

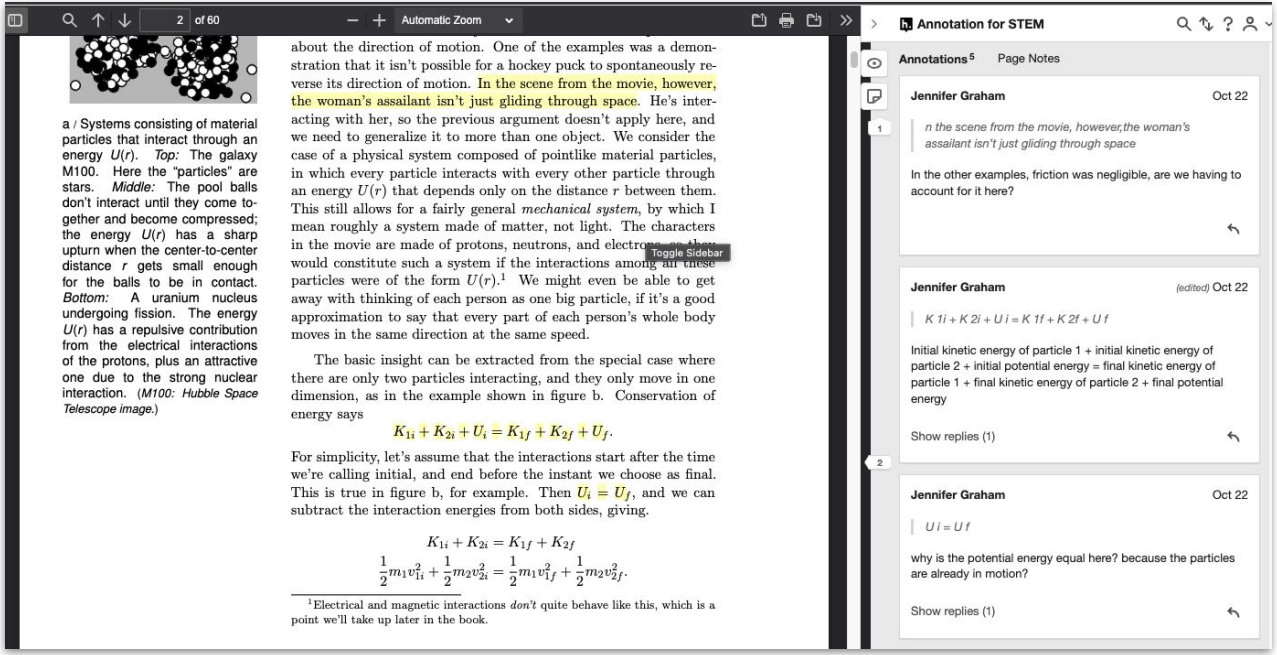
✅ A way to scaffold learning and emphasize process over product

✅ A strategy for students to manage information in preparation for summative assessments

✅ A safe space for students to make mistakes in learning

Hypothesis in Canvas

Make your course documents annotatable



a / Systems consisting of material particles that interact through an energy $U(r)$. *Top:* The galaxy M100. Here the "particles" are stars. *Middle:* The pool balls don't interact until they come together and become compressed; the energy $U(r)$ has a sharp upturn when the center-to-center distance r gets small enough for the balls to be in contact. *Bottom:* A uranium nucleus undergoing fission. The energy $U(r)$ has a repulsive contribution from the electrical interactions of the protons, plus an attractive one due to the strong nuclear interaction. (*M100: Hubble Space Telescope image.*)

about the direction of motion. One of the examples was a demonstration that it isn't possible for a hockey puck to spontaneously reverse its direction of motion. In the scene from the movie, however, the woman's assailant isn't just gliding through space. He's interacting with her, so the previous argument doesn't apply here, and we need to generalize it to more than one object. We consider the case of a physical system composed of pointlike material particles, in which every particle interacts with every other particle through an energy $U(r)$ that depends only on the distance r between them. This still allows for a fairly general *mechanical system*, by which I mean roughly a system made of matter, not light. The characters in the movie are made of protons, neutrons, and electrons, as they would constitute such a system if the interactions among all these particles were of the form $U(r)$.[1] We might even be able to get away with thinking of each person as one big particle, if it's a good approximation to say that every part of each person's whole body moves in the same direction at the same speed.

The basic insight can be extracted from the special case where there are only two particles interacting, and they only move in one dimension, as in the example shown in figure b. Conservation of energy says

$$K_{1i} + K_{2i} + U_i = K_{1f} + K_{2f} + U_f.$$

For simplicity, let's assume that the interactions start after the time we're calling initial, and end before the instant we choose as final. This is true in figure b, for example. Then $U_i = U_f$, and we can subtract the interaction energies from both sides, giving.

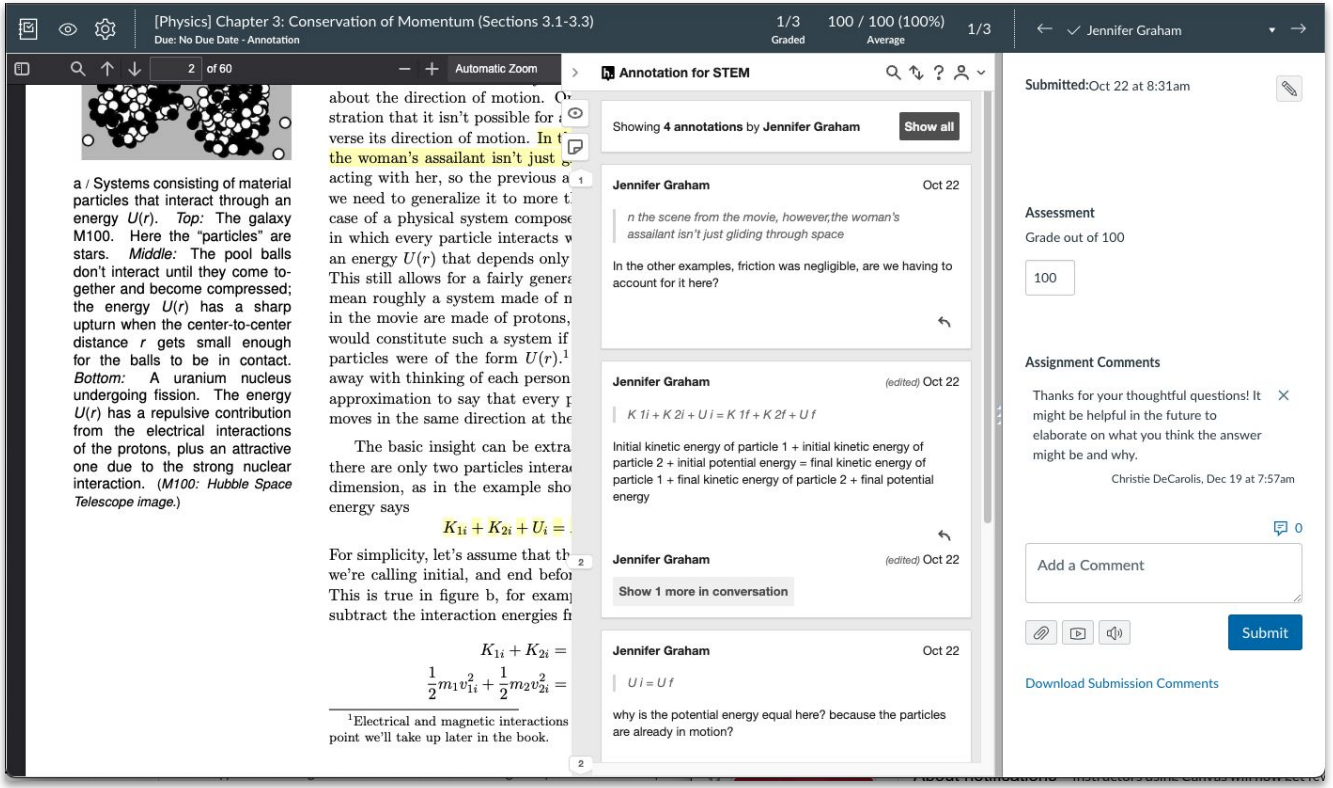
$$K_{1i} + K_{2i} = K_{1f} + K_{2f}$$
$$\frac{1}{2}m_1v_{1i}^2 + \frac{1}{2}m_2v_{2i}^2 = \frac{1}{2}m_1v_{1f}^2 + \frac{1}{2}m_2v_{2f}^2.$$

[1] Electrical and magnetic interactions *don't* quite behave like this, which is a point we'll take up later in the book.

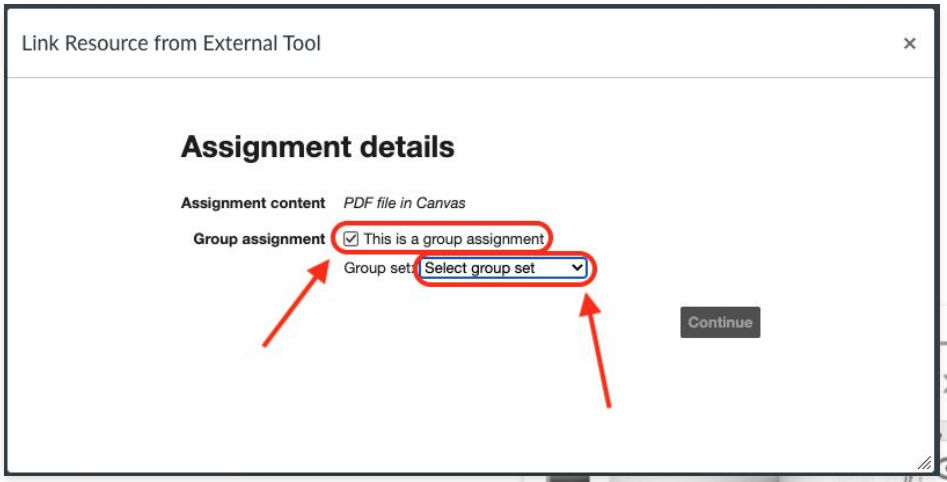
- Students signed in automatically
- Private groups created for courses

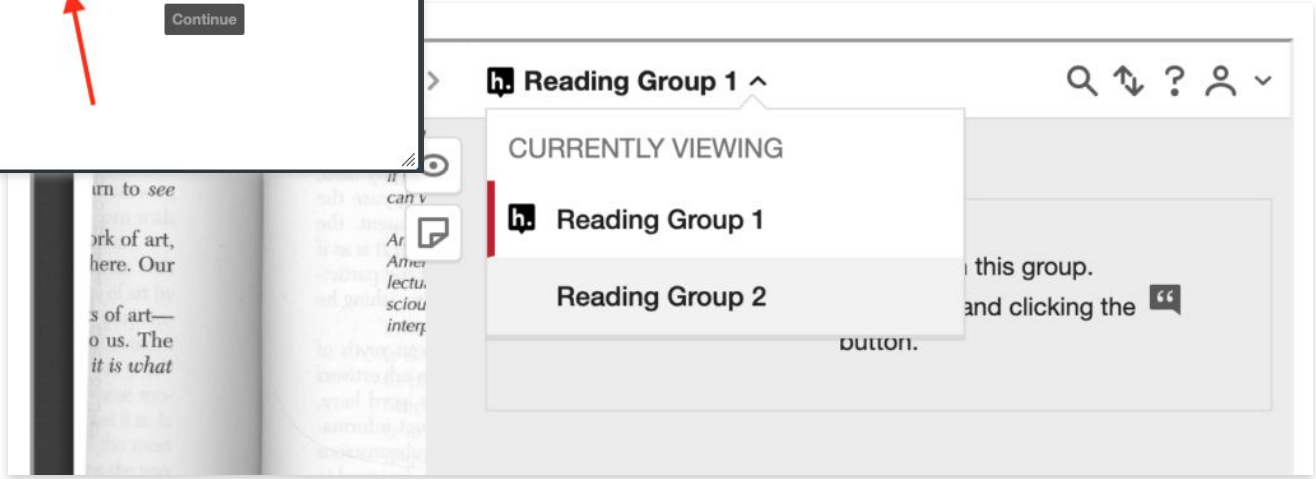
canvas
BY INSTRUCTURE

Grade annotation “sets” in SpeedGrader



Use Canvas Group Sets for small group work





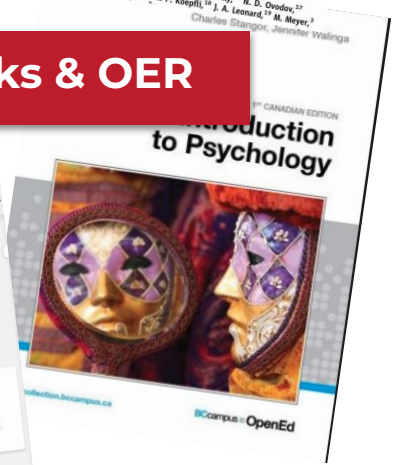
Getting started with Hypothesis social annotation

What can you annotate?

PDFs

Webpages & online articles

Open textbooks & OER



JSTOR & VS articles/e-texts

YouTube video transcripts

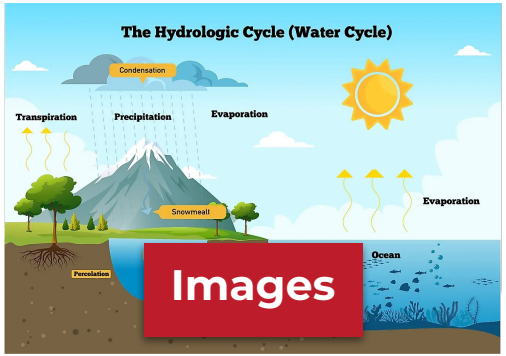
What can you put in an annotation?

Lorem ipsum dolor sit amet,
consec piscing
elit, usmod tempor
incididunt ut labore et
dolore magna aliqua.

Text

https://

Links



Images

The danger of a single story

Videos

YouTube
Vimeo

Tags

#thesis

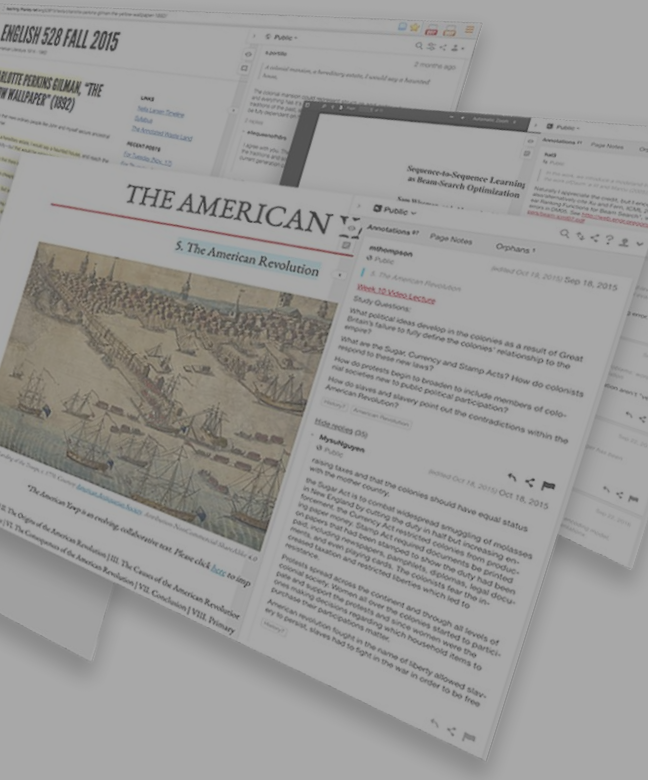
$$\int_a^b f'(x)\,dx = f(b) - f(a)$$

$$\frac{d}{dx}\int_a$$

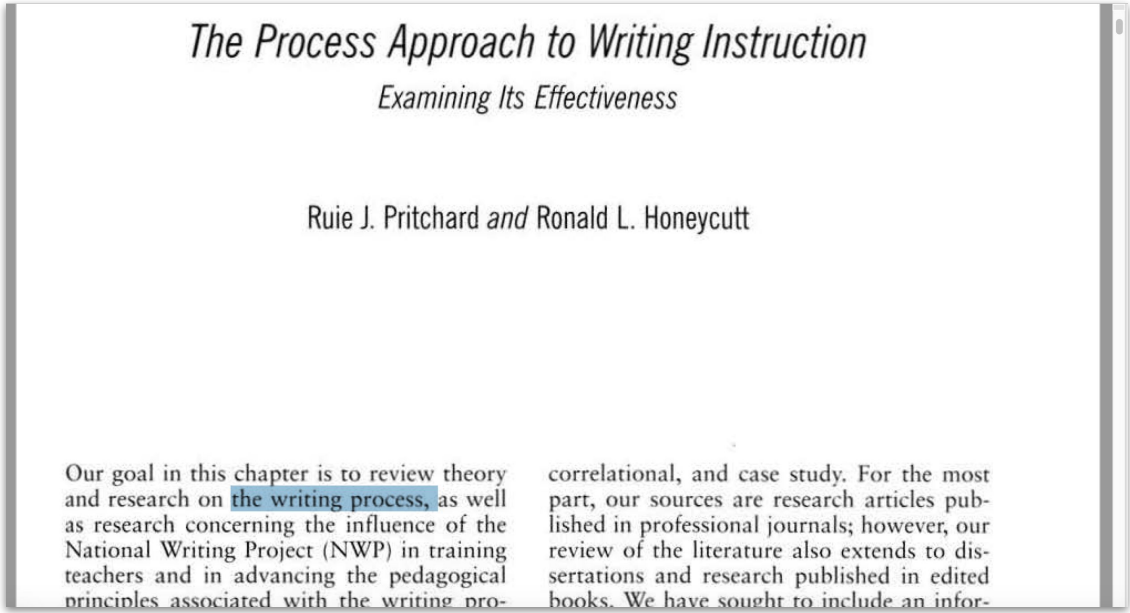
Equations

Emojis

Help docs on adding links/images and adding videos to annotations



PDFs must have a selectable text layer



The Process Approach to Writing Instruction

Examining Its Effectiveness

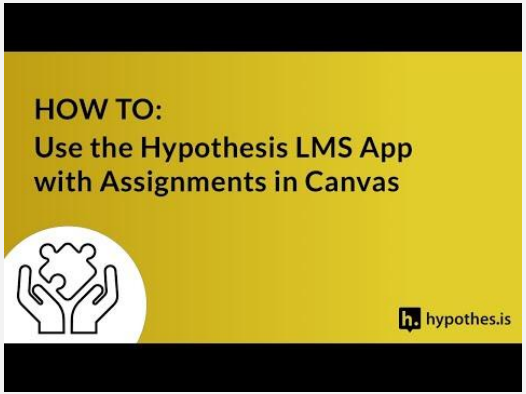
Ruie J. Pritchard *and* Ronald L. Honeycutt

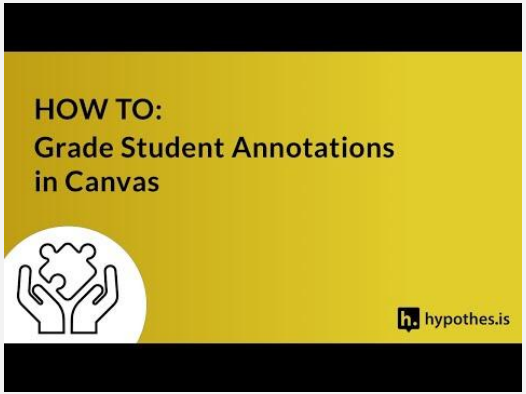
Our goal in this chapter is to review theory and research on the writing process, as well as research concerning the influence of the National Writing Project (NWP) in training teachers and in advancing the pedagogical principles associated with the writing pro-

correlational, and case study. For the most part, our sources are research articles published in professional journals; however, our review of the literature also extends to dissertations and research published in edited books. We have sought to include an infor-

If you can't select text, copy, and paste, you can't annotate (more on PDF text layers)

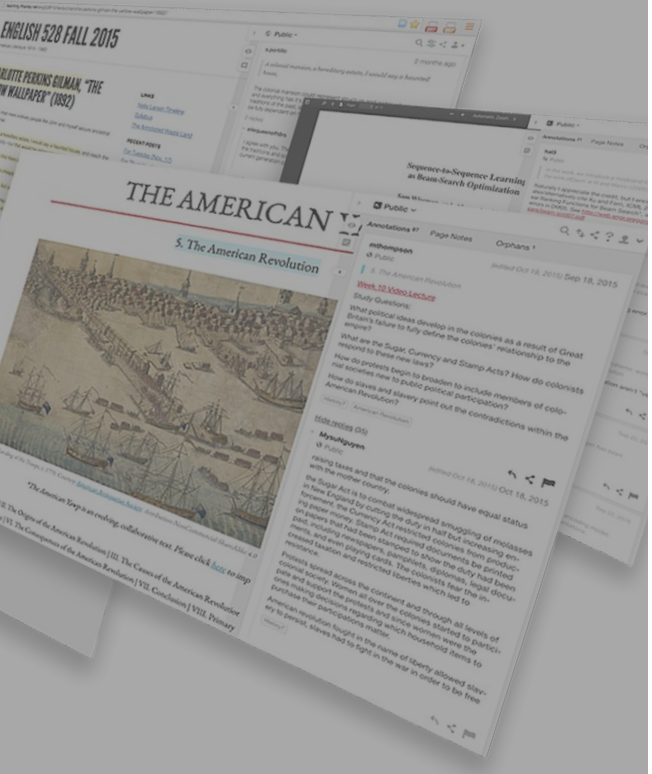
Hypothesis in Canvas Resources





- How to set up Hypothesis readings through Canvas Modules
- How to set up Hypothesis readings through Canvas Assignments
- How to annotate YouTube videos with Hypothesis in Canvas
- How to grade Hypothesis annotations in Canvas
- Using Group Sets with Hypothesis in Canvas
- A student guide to Hypothesis in Canvas

More here.



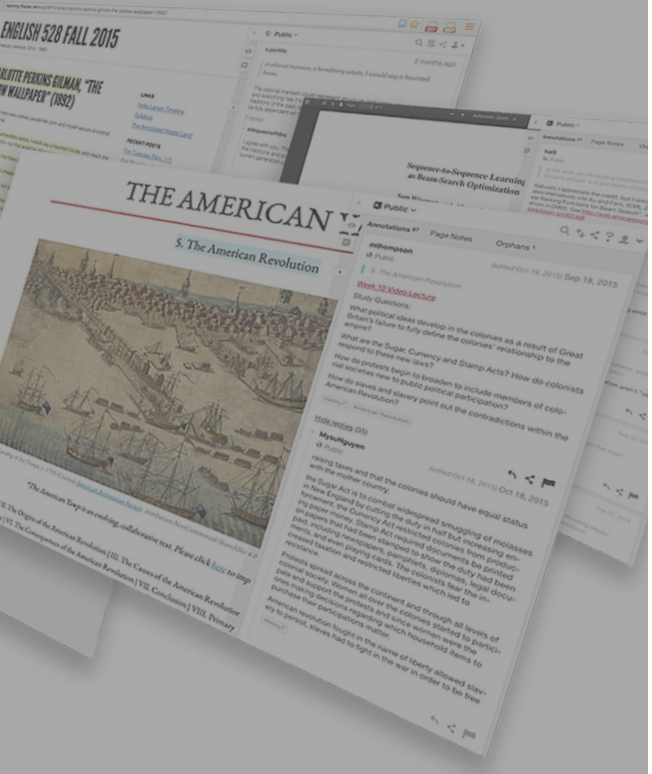
Hypothesis Teaching and Learning Resources

General Hypothesis resources useful to teacher and students:

- Annotation tips for students
- An Illustrated Guide to Annotation Types
- Adding Images, Videos, and Links to your Annotations
- Examples of classroom use

More here.

Hypothesis Partnership Program



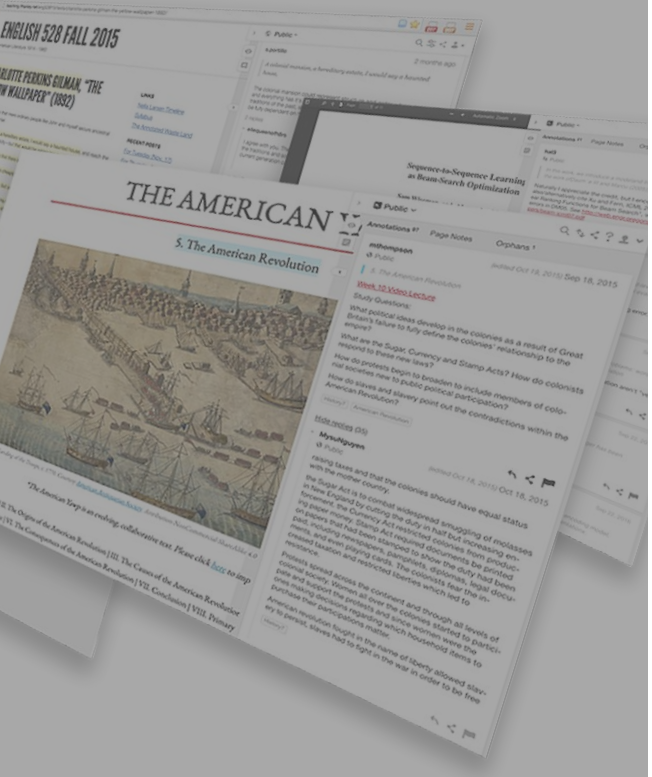
Pedagogical support

Custom training and instructional design

- 1:1 instructional design consultations
- Webinars

More partner resources

- Check out our faculty panel discussions, Liquid Margins, for inspiration
- Find assignment ideas in Resources for Social Annotation
- Join the Hypothesis Educator Forum
- Technical support from support@hypothes.is



Hypothesis Academy

- Earn a **Hypothesis Certified Educator Credential**
- Hypothesis Academy are two-week asynchronous courses designed to teach you not only how to use the Hypothesis tool, but how to design social annotation assignments to best support your students' learning.
    - Social Annotation 101
    - Social Annotation in the Age of AI
- **Learn more and register for the next cohort**

Register for our Partner Workshops

- Activating Annotation in your LMS
- Using multimedia and tags in annotation
- Annotate your syllabus
- Grading and feedback for social annotation
- Creative ways to use social annotation
- Show-and-tell participatory workshop
- Using Hypothesis with small groups
- Annotating in STEM subjects

Hypothesis Customer Success Team

cdecarolis@hypothes.is

Workshop Evaluations

https://tinyurl.com/mwetcy54