

Hypothesis multimedia features: Incorporating UDL into your course

Hypothesis Workshop

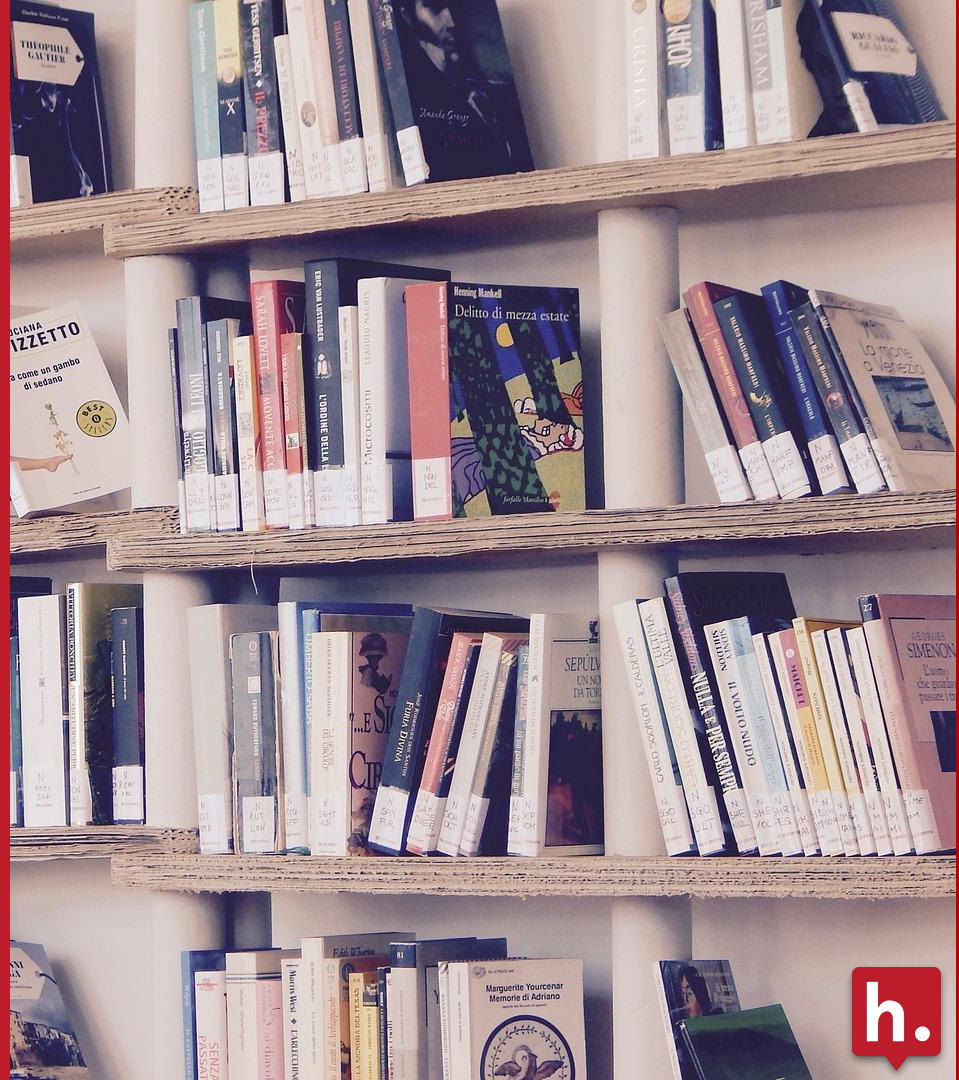


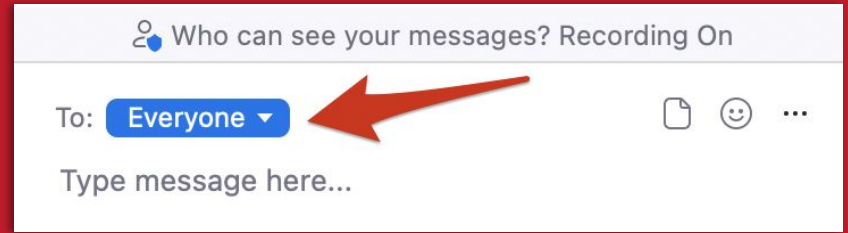
<https://bit.ly/lpchypf23>



| 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

The image displays several overlapping Hypothesis browser annotations. The most prominent one is on a page titled "ENGLISH 528 FALL 2015" with a video lecture titled "THE AMERICAN Revolution". The video player shows a man speaking. The Hypothesis interface includes a toolbar with icons for creating annotations, a list of existing annotations, and a text area for writing notes. The notes discuss the American Revolution, mentioning the Sugar Act, the Stamp Act, and the role of women in the movement. Other overlapping windows show a course page for "ENGLISH 528 FALL 2015" and a page titled "Sequence-to-Sequence Learning as Beam-Search Optimization".





**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

The image displays several overlapping Hypothesis browser windows, illustrating its use in a classroom. The windows show:

- A course page for "ENGLISH 528 FALL 2015" with a list of students and a link to "Charlotte Perkins Gilman, 'The Yellow Wallpaper' (1892)".
- A video player showing a man speaking.
- A document titled "THE AMERICAN" with a section on "5. The American Revolution" featuring an illustration of a colonial town and a video lecture titled "Week 10 Video Lecture".
- Annotations on the document, including a note about the American Revolution and a note about the Sugar, Currency and Stamp Acts.
- A list of "Study Questions" related to the American Revolution.
- A list of "Study Questions" related to the American Revolution.
- A list of "Study Questions" related to the American Revolution.



COURSE
UNIV 112 Focused Inquiry II: Fall 2016
REQUIRED FOR ALL UCU STUDENTS + GEN ED COURSE
FALL SEMESTER
Dempster
ycu.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
THURSDAY

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, the ability to
communication, and information fluency skills (UNIV 112 is designed to provide you
multimodal 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
complexity of those concepts with each subsequent unit.
critical thinking: continue to apply critical thinking to texts and ideas, with a specific focus on
and creating academic arguments that make sound claims and support conclusions
proficiency: create formal and informal pieces of writing in a variety of genres to
multimodal, analytical, and ethical reasoning argument
Peer Learning: continue to work with peers on group assignments, projects and
activities; practice peer response to writing assignments
communication: continue to build communication skills through active participation in
sessions and formal presentations
Information Fluency: retrieve information through YCU Libraries, evaluate source reliability,
read and respond to texts
Civic Responsibility: consider multiple ethical points of view; apply methods of
reasoning to texts and arguments
Quantitative Literacy: evaluate quantitative information when used as evidence
will continue to develop your ability to interpret, analyze, evaluate, and infer based on
The course will emphasize writing, revising, and proofreading. By the end of the
course work that reflects your ability to appropriately frame writing according to both
context. More specifically, you will be equipped to narrow your topics to an academic
level, analyze and synthesize multiple texts, construct an argument based on ethical
evidence which contends with counter-arguments, shape your ideas for an
correct mechanical problems in your writing, and cite sources appropriately.

up into three theoretically and thematically connected units. These units are:
Culture/Text
Argument



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.

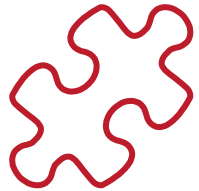


Hypothesis Starter Assignments

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?

Provide multiple means of
Engagement →

Affective Networks
The "WHY" of learning



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 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:



Provide multiple means of
Representation →

Recognition Networks
The "WHAT" of learning



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

The screenshot shows a YouTube video player on the left and a JSTOR annotation interface on the right. The video is titled "Ancient & Medieval Medicine: Crash Course" and features a presenter in a suit. The JSTOR interface, titled "Annotation for STEM", displays a list of annotations with timestamps corresponding to the video. The annotations are:

- 4:47** What we do have is a collection of texts of various age and unknown authorship called the Hippocratic corpus. According to the corpus, Hippocrates I was a fan of the Pythagoreans.
- 4:57** (Remember, the secret math cult?) But his skepticism—or doubt that certain knowledge is possible—set Hippocratic medicine apart from a lot of Greek natural philosophy.
- 5:06** Hippocrates emphasized reason, observation, and medical prediction. He emphasized that diet and the environment influence health, not the direct will of the gods.
- 5:16** And his oath—"do no harm"—still underpins medical education. Hippocrates was the Jimi Hendrix of Eurasian and North African medicine, innovating a new style that challenged traditional ideas.
- 5:27** But Hippocratic physicians had to compete among many schools of healers. It was a Roman named Galen who became medicine's Michael Jackson—the popularizer of a standard humorism that would last until the 1800s.

The JSTOR annotations are displayed in a list on the right side of the video player, with each annotation including the user's name (Christie DeCarolis), the time since posted, and the text of the annotation. Some annotations include a "More" link at the end.

- [YouTube instructions](#)
- [JSTOR instructions](#)

... and by annotating with images and video

Jennifer Graham Oct 22, 2022


In other words, this is a conservation 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



The image is a YouTube video thumbnail. It features a green pool ball with the number 9 on it, set against a dark red background. A large white play button is overlaid on the right side of the ball. The text 'PHYSICS' is at the top left, and 'What Is Conservation of Momentum' is written across the top. A 'GPE' logo is in the bottom left corner. The words 'Conservation of Momentum' are written in large white letters at the bottom.

Jennifer Graham Oct 22, 2022

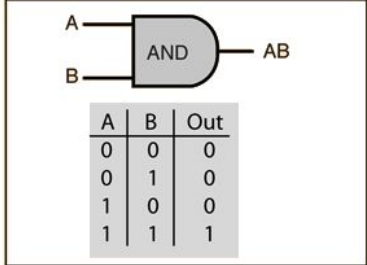
And so our perceptron implements a NAND gate

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.



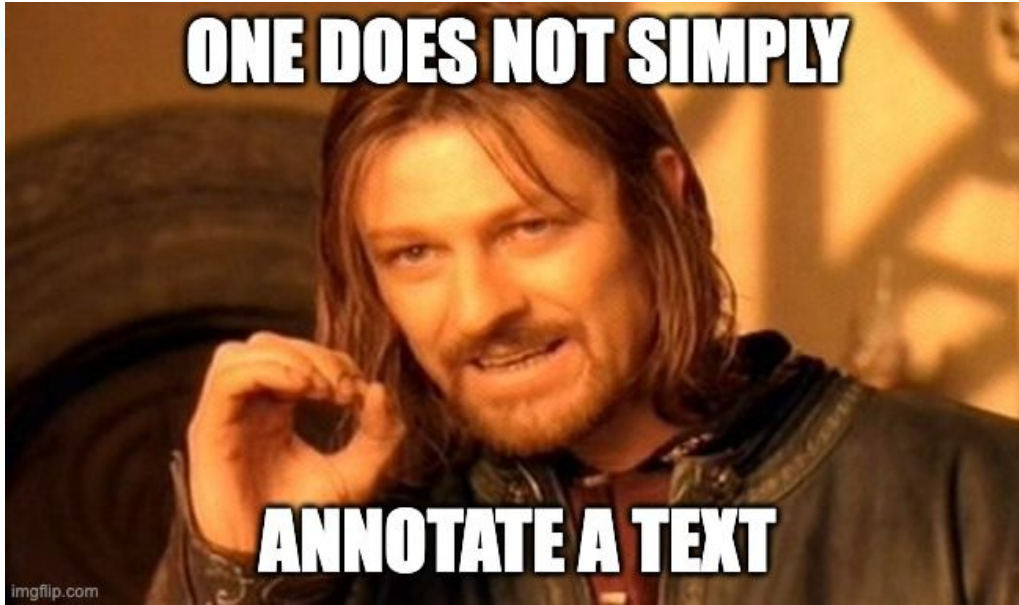
The diagram shows an AND gate with two inputs, A and B, and one output, AB. Below the gate is a truth table with three columns: A, B, and Out. The rows represent the four possible combinations of inputs: (0,0), (0,1), (1,0), and (1,1). The output is 0 for the first three rows and 1 for the last row.

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



Provide multiple means of
Action & Expression →

Strategic Networks
The "HOW" of learning



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...

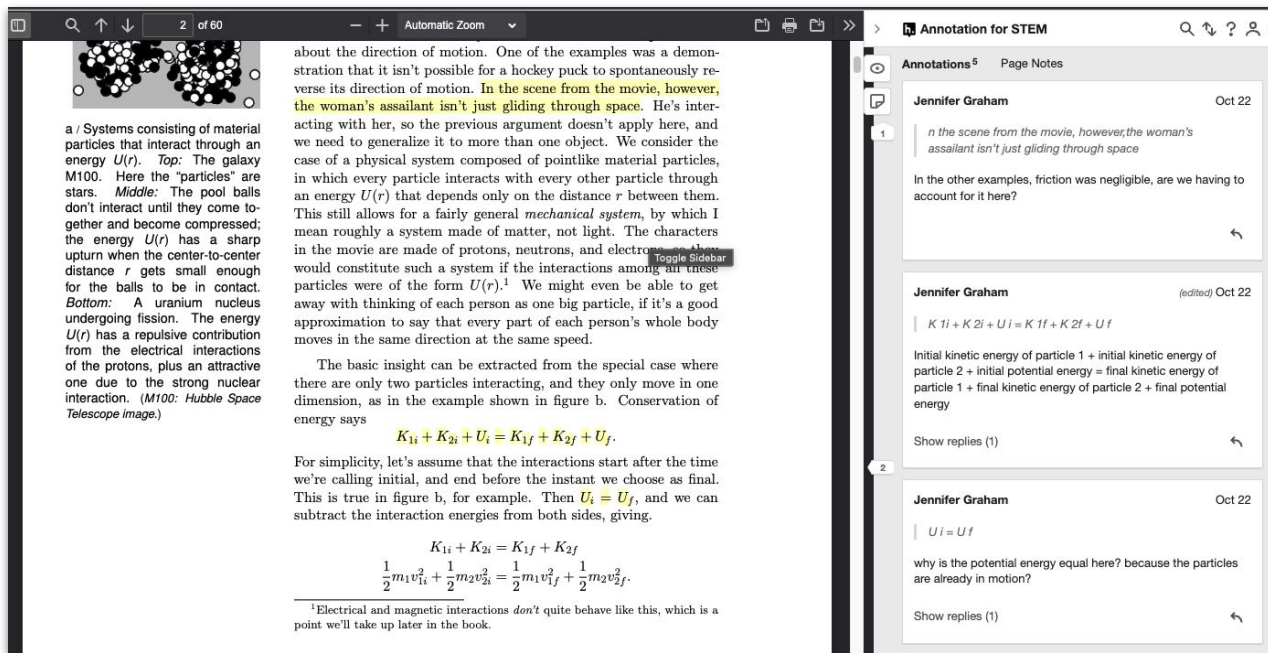
- ✓ A way to scaffold learning and emphasize process over product
- ✓ A strategy for students to manage information in preparation for summative assessments
- ✓ A safe space for students to make mistakes in learning

Hypothesis in Canvas

The image displays several overlapping browser windows with Hypothesis annotations. The most prominent window shows a Canvas LMS page for 'ENGLISH 528 FALL 2015'. The page title is 'CHARLOTTE PERKINS GILMAN, "THE YELLOW WALLPAPER" (1892)'. The page content includes a video player with a man speaking, a list of links, and a table of contents with items like 'I. Introduction', 'II. The Origins of the American Revolution', 'III. The Causes of the American Revolution', 'IV. The American Revolution', 'V. The Consequences of the American Revolution', 'VI. Conclusion', and 'VII. Primary'. The Hypothesis interface shows a public group named 'emphosmpson' and a video lecture titled 'Week 10 Video Lecture'. The video player shows a scene from a historical film or painting depicting a large settlement with many ships in the harbor. The Hypothesis annotations are visible as small icons and text boxes over the video and text on the page.



Make your course documents annotatable



The screenshot displays a document viewer interface. On the left, a document page is shown with a dark sidebar on the far left. The document text discusses energy $U(r)$ and particle interactions. A "Toggle Sidebar" button is visible. On the right, an "Annotation for STEM" panel is open, showing three annotations by Jennifer Graham. The first annotation highlights a sentence in the text. The second annotation contains a physics equation. The third annotation asks a question about potential energy.

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, so 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,

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

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

Annotation for STEM

Annotations⁵ Page Notes

Jennifer Graham Oct 22

In the scene from the movie, however, the woman's assailant isn't just gliding through space

In the other examples, friction was negligible, are we having to account for it here?

Jennifer Graham (edited) Oct 22

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

Initial kinetic energy of particle 1 + initial kinetic energy of particle 2 + initial potential energy = final kinetic energy of particle 1 + final kinetic energy of particle 2 + final potential energy

Show replies (1)

Jennifer Graham Oct 22

$U_i = U_f$

why is the potential energy equal here? because the particles are already in motion?

Show replies (1)

- Students signed in automatically
- Private groups created for courses



Grade annotation “sets” in SpeedGrader

[Physics] Chapter 3: Conservation of Momentum (Sections 3.1-3.3)
Due: No Due Date - Annotation
1/3 Graded 100 / 100 (100%) Average 1/3
Jennifer Graham

2 of 60 Automatic Zoom

Annotation for STEM

Showing 4 annotations by Jennifer Graham [Show all](#)

Jennifer Graham Oct 22

In the scene from the movie, however, the woman's assailant isn't just gliding through space

In the other examples, friction was negligible, are we having to account for it here?

Jennifer Graham (edited) Oct 22

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

Initial kinetic energy of particle 1 + initial kinetic energy of particle 2 + initial potential energy = final kinetic energy of particle 1 + final kinetic energy of particle 2 + final potential energy

Jennifer Graham (edited) Oct 22

[Show 1 more in conversation](#)

Jennifer Graham Oct 22

$U_i = U_f$

why is the potential energy equal here? because the particles are already in motion?

Submitted: Oct 22 at 8:31am

Assessment
Grade out of 100

100

Assignment Comments

Thanks for your thoughtful questions! It might be helpful in the future to elaborate on what you think the answer might be and why.

Christie DeCarolis, Dec 19 at 7:57am

Add a Comment

Submit

[Download Submission Comments](#)

about the direction of motion. One demonstration that it isn't possible for it to reverse its direction of motion. In the movie, the woman's assailant isn't just gliding through space; she's acting with her, so the previous analysis doesn't apply. We need to generalize it to more than two particles. This still allows for a fairly general approximation of a system made of many particles in the movie are made of protons, neutrons, and electrons, would constitute such a system if the particles were of the form $U(r)$.¹ This still allows for a fairly general approximation of a system if the particles were of the form $U(r)$.¹ away with thinking of each person as a separate entity. This approximation to say that every person moves in the same direction at the same time is only true if there are only two particles interacting. The basic insight can be extracted from the example shown here: there are only two particles interacting in one dimension, as in the example shown here.

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

For simplicity, let's assume that the particles are moving in one dimension. We're calling initial, and end final. This is true in figure b, for example. We can subtract the interaction energies from both sides of the equation.

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

¹Electrical and magnetic interactions point we'll take up later in the book.

Use Canvas Group Sets for small group work

Link Resource from External Tool ×

Assignment details

Assignment content *PDF file in Canvas*

Group assignment This is a group assignment

Group set Select group set ▾

Continue

h Reading Group 1 ^ 🔍 ↕ ? 👤 ▾

CURRENTLY VIEWING

- h** Reading Group 1
- Reading Group 2

... this group. and clicking the “

button.

Getting started with Hypothesis social annotation



What can you annotate?

PDFs

The Atlantic website interface showing a search bar, navigation menu, and two article snippets. The first snippet is 'As We May Think' by Vannevar Bush, dated July 1945. The second snippet is a news release from the US Census Bureau dated April 26, 2021, titled 'Census Bureau Releases Quality Indicators on 2020 Census'.

Webpages & online articles

THE
BLUEST
EYE

A NOVEL

Toni Morrison

Open textbooks & OER



Vital
Source®

JSTOR & VS articles/e-texts

A screenshot of a YouTube video player. The video title is 'Ancient & Medieval Medicine: Crash Course'. The video shows a man speaking in front of a bookshelf. A transcript overlay is visible on the right side of the player, showing text from the video.

YouTube video transcripts

Complete Mitochondrial Genomes of Ancient Canids Suggest a European Origin of Domestic Dogs

O. Thalmann,^{1,2} B. Shapiro,³ P. Cul,³ V. J. Schuenemann,⁴ S. K. Searcy,¹ D. L. Greenfield,⁵ M. B. Germonpre,⁶ M. V. Sablin,⁷ F. López-Giráldez,⁸ X. Domingo-Roura,⁹ H. Nijpstra,¹⁰ H.-P. Uerpmann,¹¹ D. M. Lippman,¹² A. A. Acosta,¹³ L. Gernoth,¹⁴ R. W. Schmitz,¹⁵ B. Worthington,¹⁶ J. E. Buikstra,¹⁷ A. Drukhov,¹⁸ A. S. Grigoriadis,¹⁹ N. D. Ovodov,²⁰ N. Wahlberg,²¹ A. H. Freedman,²² R. M. Schweizer,²³ K. P. Koepfli,²⁴ J. A. Leonard,²⁵ M. Meyer,²⁶ Charles Storz,²⁷ Jennifer Vrking

Introduction to Psychology



What can you put in an annotation?

Lorem ipsum dolor sit amet, consectetur adipiscing elit, **Text** usmod tempor incididunt ut labore et dolore magna aliqua.

<https://>

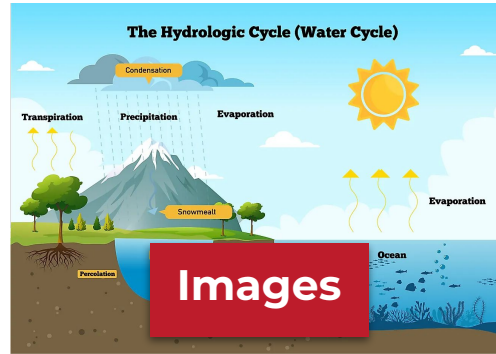
Links

Tags

#thesis



Emojis



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

$$\frac{d}{dx} \int_a^x f(x) dx = f(x)$$

Equations



The danger of a single story

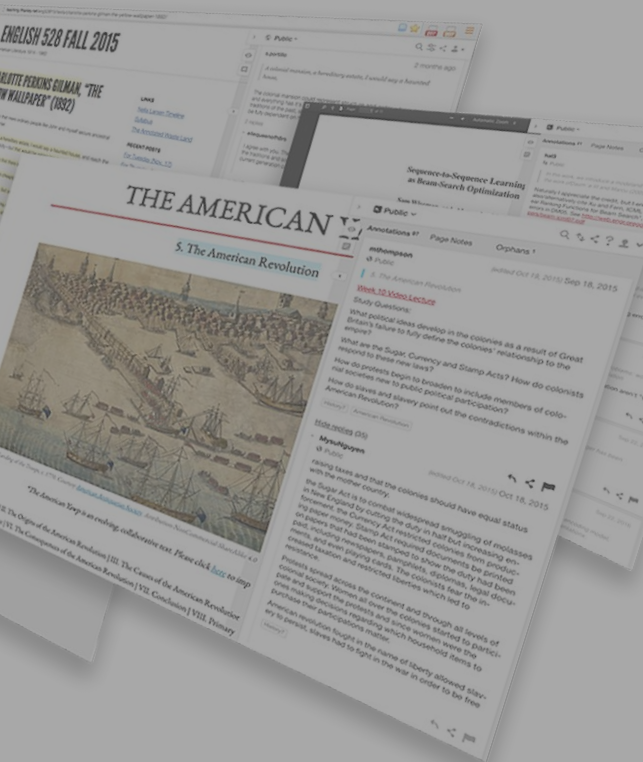
Videos

**YouTube
Vimeo**

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

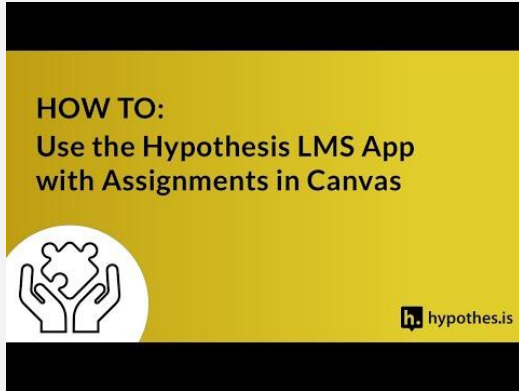
Our goal in this chapter is to review theory and research on the writing process, as well as research concerning the influence of the National Writing Project (NWP) in training teachers and in advancing the pedagogical principles associated with the writing pro-

cess. 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](#).

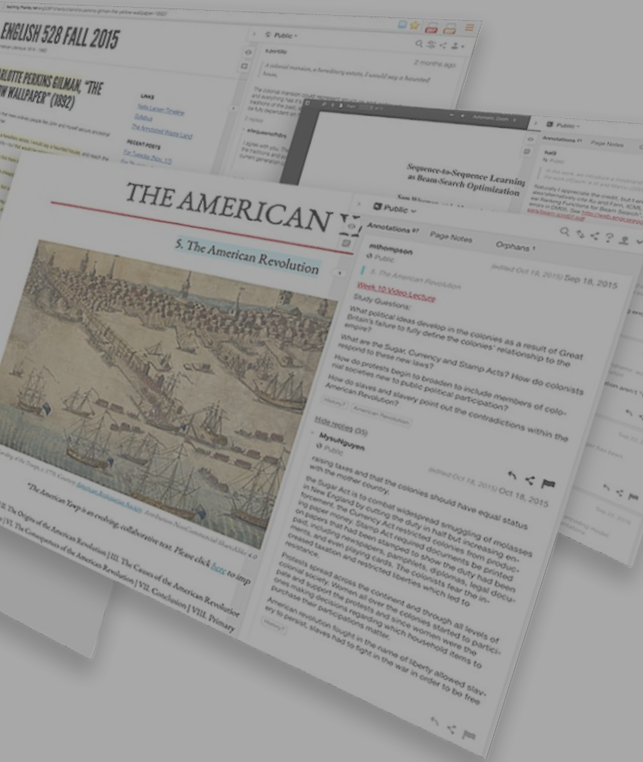


Hypothesis Teaching and Learning Resources

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

ENGLISH 528 FALL 2015
CHARLOTTE PERKINS GILMAN, "THE YELLOW WALLPAPER" (1892)

THE AMERICAN
5. The American Revolution

Sequence-to-Sequence Learning as Beam-Search Optimization

The American Revolution

hypothesis
Public
Week 10 Video Lecture
Study Questions:
What political ideas develop in the colonies as a result of Great Britain's failure to fully define the colonies' relationship to the empire?
What are the Sugar, Currency and Stamp Acts? How do colonists respond to these new laws?
How do protests begin to broaden to include members of colonial societies new to public political participation?
How do slaves and slavery point out the contradictions within the American Revolution?

hypothesis
Public
raising taxes and that the colonies should have equal status with the mother country.
the Sugar Act to combat widespread smuggling of molasses in New England by cutting the duty in half but increasing enforcement; the Currency Act restricted colonies from producing paper money. Stamp Act required documents to be printed on stamped paper that had been stamped to show the duty had been paid, including newspapers, pamphlets, diplomas, legal documents, and even playing cards. The colonists fear the increased taxation and restricted liberties which led to resistance.
Protests spread across the continent and through all levels of colonial society. Women all over the colonies started to participate and support the protests and since women were the backbone their participations matter.
American revolution fought in the name of liberty allowed slavery to persist, slaves had to fight in the war in order to be free (Henry?)





Pedagogical support

Custom training and instructional design

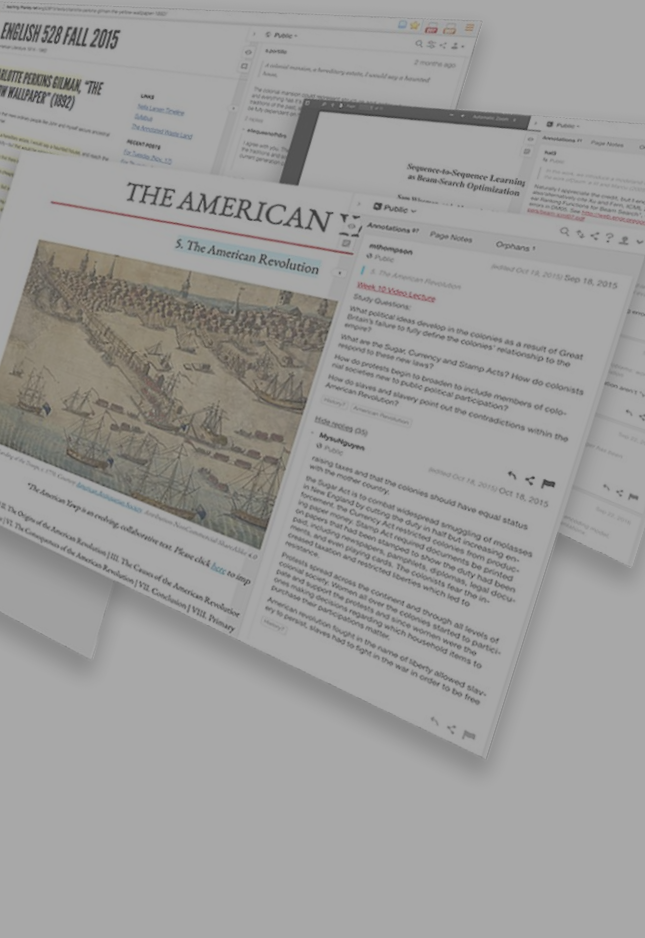
- 1:1 instructional design consultations
- Webinars

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>