

# Scaffolding Critical Thinking and Communication



The Goal: What  
do we want  
students to do?

Critically Think &  
Communicate Ideas:

- Make Connections  
between concepts
- Distill & Organize  
Pertinent Information
- Formulate an Argument
- Support with Evidence

# What's The Problem?



Think about your answer to #1 or #2  
(30 seconds):

- 1) *What do you find hardest about teaching these concepts?*
- 2) *What do students have the hardest time doing?*

**When prompted** put your answer to #1  
or #2 in the chat

# The Problem: Translating these “Non-Content” Goals

Starting with the literature for ideas

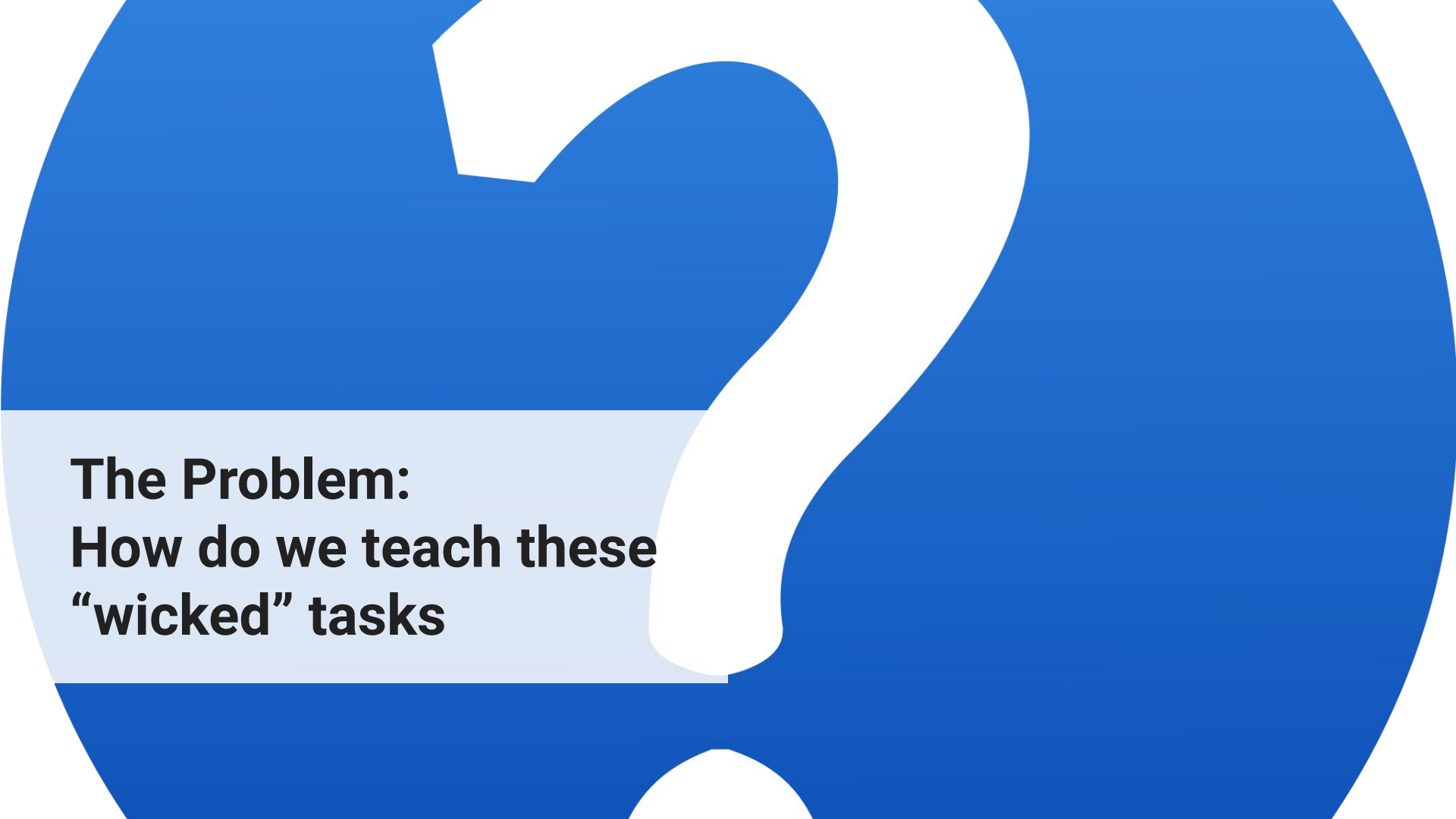
Identifying connections among research papers with different contexts

Using those connections to establish/defend a thesis

Building an argument that *integrates* the evidence

Anticipating and addressing counter arguments

Translating ideas to “professional” writing



**The Problem:  
How do we teach these  
“wicked” tasks**

# One Solution: Scaffolding The Process

## Structured Progress Tasks

- Teach the Process (Not the Content)

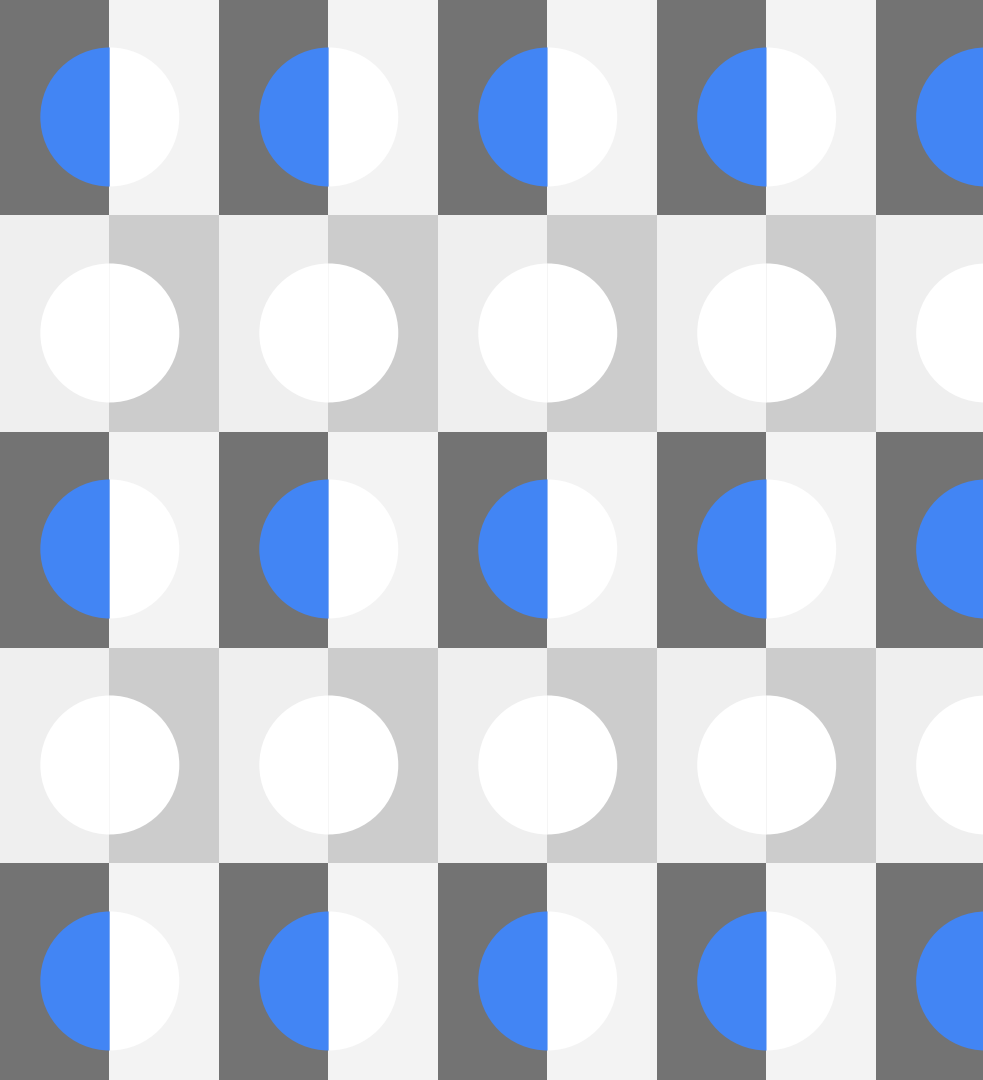
## Scaffolded and Iterative

- Opportunity to “fail” and try again

## Repeated Opportunity for Feedback

- Ask guiding questions





# **Scaffolding Critical Thinking in a Research Paper**

# Progress Task #1 (Week 1)

Generate 2-3 Topics of Interest

- *What are you curious about?*
- *Why did you take this course? What did you want to learn?*
- *Review Proposed Topics/Syllabus*

**Start Easy  
and Early!**

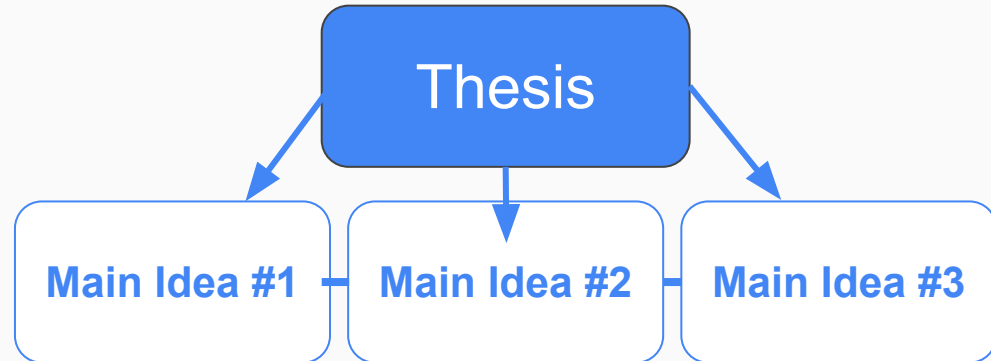


# Progress Task #2 (Week 2)

- 1) Find and Read 3 Empirical Sources about Each Topic
  - *Introduce Research Databases*
  - *Look at "Future Directions"*
  - *Any conflicting/overlapping findings?*
- 2) Summarize Main Idea, Strengths/Weaknesses of Each Article
  - *Meaning vs. Superficial*
- 3) 2-3 Research Questions/Ideas

# Progress Task #3 (Week 4)

- 1) Find, Read, and Summarize 6 More Articles
  - *Overarching themes, discrepancies?*
  - *Check Reference sections for more articles*
  - *What can you teach someone based on this research?*
- 2) Propose a thesis statement
  - *How are your main ideas related?*



# Progress Task #4 (Week 6)

- 1) Find, Read, Summarize 6 MORE articles
  - *Expect to review 30-50 articles to get a good understanding of your topic*
  - *What new connections/discrepancies are you finding*
- 2) Revise Thesis as Needed
- 3) How does each article relate to thesis statement
  - *Is an article still relevant? If so, how does it connect?*

# Progress Task #5 (Week 8)

## 1) Create a Detailed Outline

- *Specific supporting evidence*
- *Connection between evidence*

## 2) Introduction draft

- *Roadmap*

Below is an example of the components of a detailed outline – each “component” should include a 1-2 sentence description; however, you are not required to follow this format – it is simply a suggestion of helpful info to include in your outline.

- I. Introduction
  - a. Hook
  - b. Introduce reader to topic/basic premise, issue, or definition
  - c. Thesis statement that presents a roadmap for the reader by briefly stating the main points to be discussed in the paper
- II. Main idea/variable #1 of thesis statement
  - a. Supporting evidence from research
  - b. Supporting evidence from research
  - c. Explanation of how the supporting evidence from a. and b. can be integrated to support main idea AND relates back to thesis
- III. Main idea/variable #2 of thesis statement
  - a. Supporting evidence from research
  - b. Supporting evidence from research
  - c. Explanation of how the supporting evidence from a. and b. can be integrated to support main idea AND relates back to thesis

c. Explanation of how the supporting evidence from a. and b. can be integrated to support main idea AND relates back to thesis

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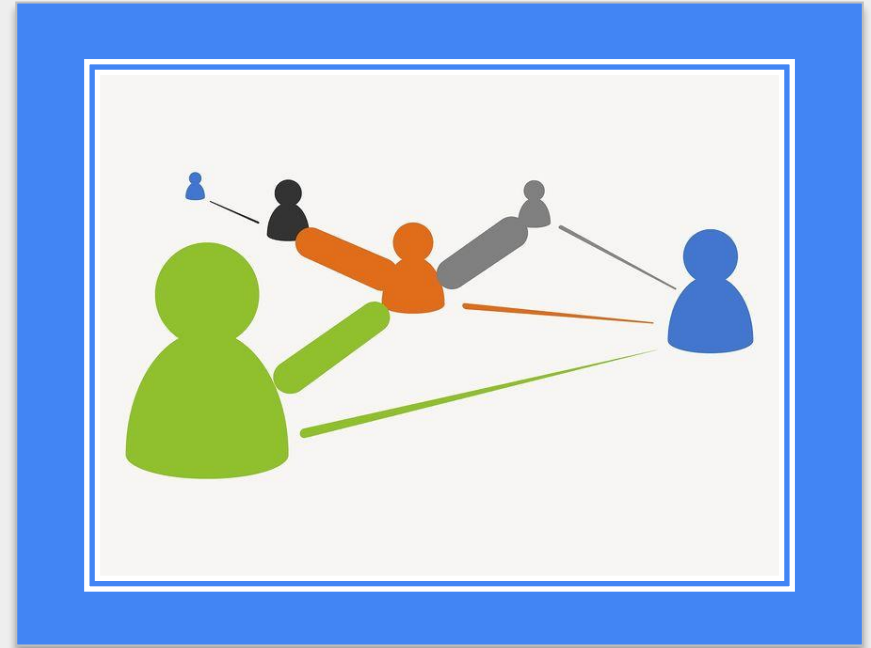
# Progress Task #6 (Week 10)

- 1) Revised Introduction/Thesis
- 2) One “Main Idea” Section
  - *How is research being integrated?*
  - *Plot summary or driven by main idea?*

# Progress Task #7 (Week 12)

- 1) “Full” Draft for Peer Editing
- 2) Guided Editing
  - a) Clear Thesis?
  - b) Supporting evidence?
  - c) Integrated studies?
  - d) Author’s **own** explanation?
  - e) Topic/Closing Sentences?
  - f) Organization?

Grade the editing...not the draft!



# Progress Task #8 (Last Week)

FINAL PAPERS!!!



# Extrapolating to Large Classes

- 1) Formulate Initial Hypotheses
- 2) Group Work with Guided Questions on Slides

