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Writing Workshop I

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## Beginning the Interdisciplinary Research Process

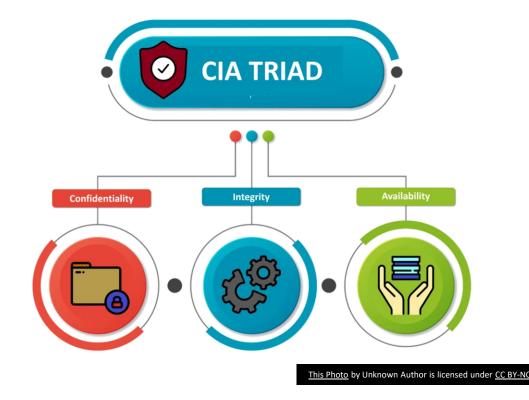


- **STEP ONE:** Define the Problem
- **STEP TWO:** Justify using an interdisciplin ary approach
- **STEP THREE:** Identify relevant discipline s and choose the most relevant to the pro blem
- **STEP FOUR:** Conduct a Literature Search
- **STEP FIVE:** Develop adequacy in each rel evant discipline
- **STEP SIX:** Analyze the problem and eval uate each insight into it
- **STEP SEVEN:** Identify conflicts between i nsights and locate their sources
- **STEP EIGHT:** Creating Common Ground
- STEP NINE: Integrate Insights
- **STEP TEN:** Produce an interdisciplinary understanding of the problem and test it

# **STEP ONE:** Define the Problem

What are the major benefits and challenges of using artificial intelligence to automate and enhance the accuracy of digital forensics investigations in cloud environments?

### **2 STEP TWO:** Justify using an interdisciplinary approach



Disciplines involved:

- Information Technology (IT)
  - While AI is typically associated with Cybersecurity, it is also IT and cloud environments.
- Criminology (Cybersecurity)
  - Understanding and examining criminology and its effect on cybersecurity is essential to understanding the investigations.
- Criminal Justice (Law)
  - Digital forensics is used in investigations and criminal court. Researching this field is essential to understanding the investigative process.

**STEP THREE:** Identify relevant di sciplines and choose the most relevant to the problem

Cybersecurity can overlap and briefly touch on the other disciplines making it the most relevant.





## STEP FOUR: Conduct a Literature Search



**STEP FIVE:** Develop adequacy in each relevant discipline

- Identify relevant phenomena and key concepts.
- Understand the assumptions and epistemologies that shape different perspectives.
- Apply appropriate theories and methods to analyze your research question.



**STEP SIX:** Analyze the problem and evaluate each insight into it

- Compare Findings:
- Share and analyze insights from different disciplines.
- Determine Value:
- Assess the relevance of each finding to your research question using Repko's elements.
- Use Comparison Charts:
- Compare disciplines systematically.
- Synthesize Information:
- Integrate insights for a comprehensive view.
- Refine Research Question:
- Focus your question based on interdisciplinary insights.





#### **STEP SEVEN:** Identify conflicts between insights and locate their sources



IDENTIFY CONFLICTS: COMPARE INSIGHTS FROM DIFFERENT DISCIPLINES TO FIND CONTRADICTIONS OR DIFFERING VIEWPOINTS.

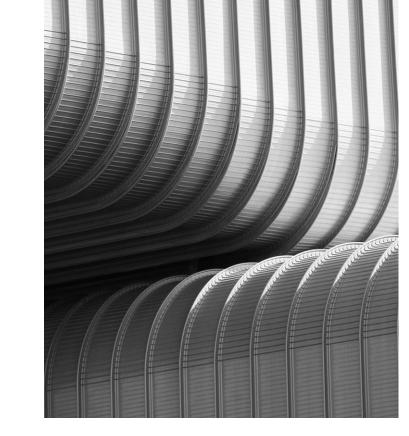


ANALYZE SOURCES OF CONFLICT: EXAMINE ASSUMPTIONS, EPISTEMOLOGIES, METHODS, AND THEORETICAL FRAMEWORKS OF EACH DISCIPLINE TO UNDERSTAND TH SOURCE OF CONFLICTS.



DOCUMENT CONFLICTS: CREATE A CHART OR LIST TO DOCUMENT CONFLICTS AND THEIR SOURCES FOR CLARITY AND ORGANIZATION. LOCATE SOURCES: REVIEW LITERATURE TO FIND SPECIFIC STUDIES, AUTHORS, OR METHODOLOGIES RESPONSIBLE FOR CONFLICTING

INSIGHTS.



THIS PROCESS ENABLES A DEEPER UNDERSTANDING OF CONFLICTING VIEWPOINTS AND AIDS IN DEVELOPING A NUANCED APPROACH TO YOUR RESEARCH QUESTION.

# STEP EIGHT: Creating Common Ground

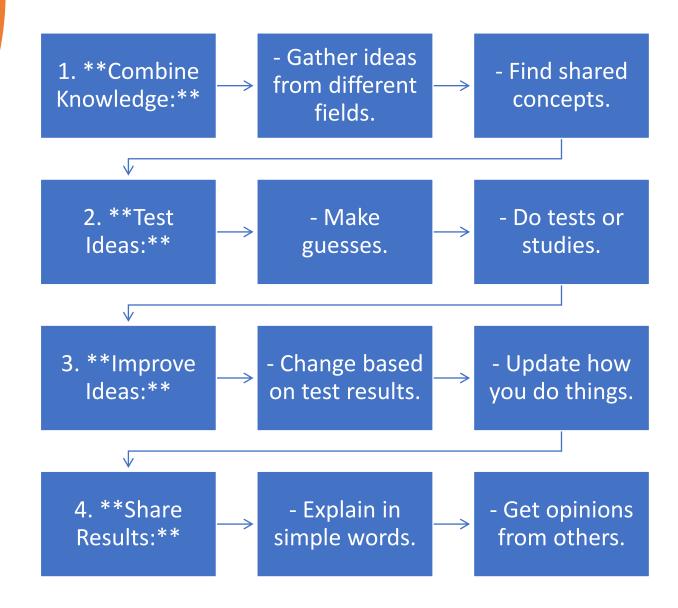
In Chapter 11, Repko talks about getting people from different fields to understand each other and work together. He says it's important to have shared understandings to make teamwork successful. Good communication between different fields is key for sharing ideas. He uses Helen Keller's story and a bridge metaphor to show how hard it is to create shared understandings. He highlights the importance of combining different viewpoints to create something meaningful.

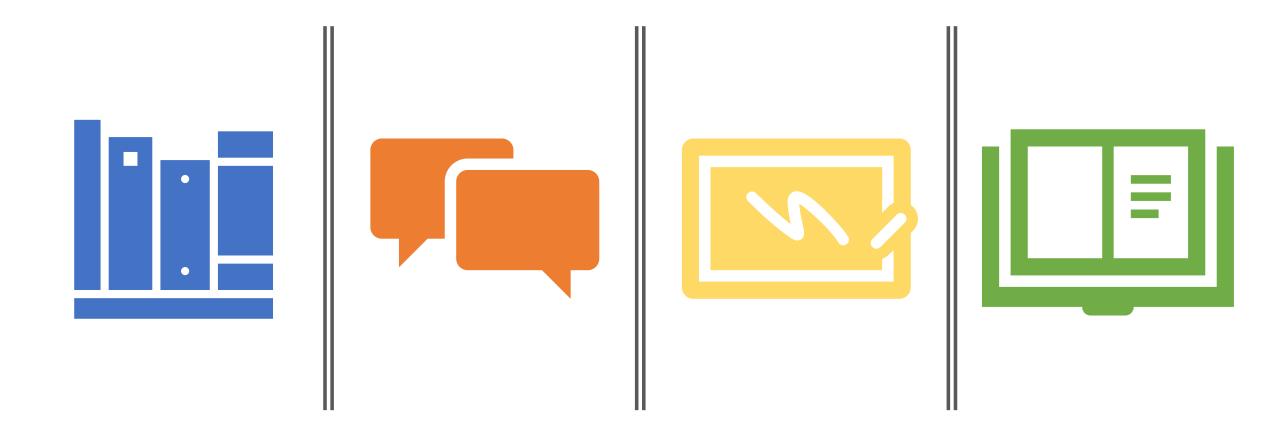
### **STEP NINE:** Integrate Insights

Integrating insights means bringing together different ideas and information from various fields to understand complicated issues fully. It involves merging information, finding common patterns, and resolving disagreements to create a clearer and stronger understanding.



STEP TEN: Produce an i nterdisciplinary unders tanding of the problem and test it





### IDS 300W: Interdisciplinary Theory & Concepts

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