# Helping Faculty Create Assignments to Advance Students' Critical Thinking about AI: A Case Study from Anthropology

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## The Inspiration

## Kevin Yee's visit to our August 2023 faculty meeting:

Al is here to stay and students WILL use it no matter what we say.

"The genie is out of the bottle..."

Thus, thinking critically about HOW to harness it is essential.



## The Purpose

 Create and test a model for faculty in the Department of Anthropology to use in their classes.

Evaluate student familiarity and engagement with AI.

• Inspire critical thinking about using AI as a tool.

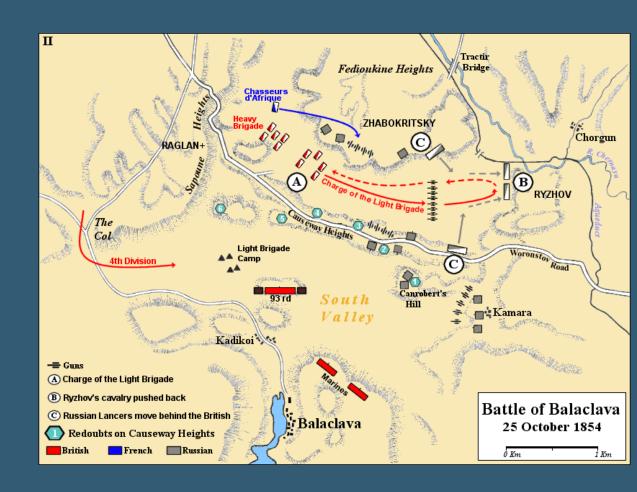
• (Personal...) See if turnitin.com's Al detector worked.

## The Class



• An archaeological perspective of fields of combat and military infrastructure from the Classical Age to WWI.

 Explores the human and cultural dimension of warfare.



#### Battlefield Archaeology Profile

- Upper division (juniors and seniors) with fewer students.
- Variety of majors.
- Significant research and writing assignment.
- Course design already includes time for discussions.
- Topics are tempting to use AI.

## EVERY DEPARTMENT HAS CLASSES THAT FIT THIS PROFILE!

## The Model

## Al Assignment Objectives

#### 1. STUDENTS KICK THE TIRES:

- Discover how AI works (most said they hadn't used it...).
- <u>Use AI as a tool</u> to develop a more comprehensive final product than they might have produced through traditional research (they thought I was crazy...).

#### 2. STUDENTS ASSESS AND REFLECT:

- How can I use AI, and what are the plusses and minuses?
- Where is it strong and weak?
- Think critically about when and where and how it's use might be appropriate and productive, both in college and beyond.

## The Assignment

(30% of course grade)

- 1. Project Proposal (15/150)
- Al "First Stab" (10/150)
- 3. Group Analysis (25/150)
- 4. Group Paper Submission (50/150)
- Individual Reflection (40/150)
- 6. Peer Review (10/150)

50% of the project grade was AI use, AI content analysis, and critical thinking about applying AI.

#### 2. Al "First Stab"

1. Create a Chat GPT account and instruct it to write a five-paragraph paper on your topic.

2. Cut and paste the entire Al product into a Word file and upload so turnitin.com can run.

Note: Turnitin.com identified 11 of 11 submissions as being 100% AI.

## 3. Group Analysis of Al "First Stab"

Completed BEFORE the literature-based research.

- •What is helpful?
- Where did it go off on a tangent?
- What else do you want to know?
- Did you like the style?
- Did it come across as "you"? If not, why?

#### 4. Individual Reflection

#### Completed AFTER the literature-based research.

- Based on what you now know about the topic, what did it do well?
- Where did it fall short?
- How would you change AI to make it better?
- What did AI help you learn about...
  - The battle and conflict itself?
  - The broader uses and limitations of AI?
  - How this impacted your learning process about the battle?
- When and where and how is using AI appropriate and productive, both in college and beyond?

## The Results

## Student Analysis of Strengths

"Good at the Big Picture..."

- Generated new ideas to explore further
- •Useful example for structure and organization.

How the majority said they would use AI in the future.

## Student Analysis of Weaknesses

But..."the devil's in the details..."

- Irrelevant information
- Too general and vague
- No citations
- No details about:
  - Historical context of battle
  - Artifacts or Materials
  - Soldiers/ participants
  - Archaeological conclusions

## Overall Impressions

"Like someone skimmed wikipedia or puffed up an essay with extra words to make it sound more full than it is".

"Saying a lot while also saying nothing."

"Like a college student procrastinated and needed to reach the word limit before the deadline."

NO ONE complimented Al's writing style!

# Something We Noticed... Al's frequent use of hyperbole, superlatives,

#### Out of 11 "First Stabs"....

- Pivotal: 15
- Crucial / critical: 13
- Valuable / invaluable: 10
- Significant: 10
- Immense / enormous: 8
- Enduring: 8
- Poignant: 6
- Brutal / bloody: 6

- Shed or shedding light: 11
- Wealth / abundance / treasure trove of artifacts: 9
- Insights: 9
- Offer a glimpse: 8
- Tangible connection: 5

## The Takeaways

## Things We Learned

#### **Students:**

- Recognize that AI still needs adult supervision.
- See utility in AI as a source of leads and ideas but wouldn't want to attach their name to the raw product.
- Generally WANT to do the right thing.

#### **Ourselves:**

- Al can be easily incorporated into assignments, with enthusiastic student buy in.
- Al product has a defined and identifiable "feel" once you know what to look for.
- Al isn't a harbinger of an educational apocalypse.

## What We'd Do Differently

- 1. Prompt AI to write a longer First Stab
  - May produce more ideas and substance.
  - More details for students to fact check.

- 2. Require a red pen "correction" of the First Stab
  - Direct ID of strengths and weaknesses vs. a narration.

- 3. A more "individual" Individual Reflection
  - Greater focus on specific utility in their future line of work.

## The Takeaway For You

- 1. This is easy for professors, and fun and instructive for students.
  - I'm giving this presentation to the Anthropology faculty at our first meeting next month.
- 2. Our model assignment is easily adaptable to any discipline.
- 3. It is also easy to beef up for a bigger project or tone down for a small assignment.

## PLEASE CONATCT ME IF YOU'D LIKE THIS PRESENTATION OR THE MODEL / ASSIGNMENT DOCUMENTS!

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