AI Faculty Toolkit

[Assignment Redesign]
Designing AI-Resistant Video Reflection Assignments

Overview:

The following is a description of how I used generative AI to help redesign an assignment so that it is more AI-resistant. I started by asking the PromptBot in BoodleBox to help me edit an online individual reflection assignment that involves watching a YouTube video so that students will need to watch the video rather than relying on AI-generated answers.

The Original Assignment:

The purpose of this assignment is to highlight a food scientist from a historically excluded group who has contributed greatly to the field. In addition to bringing awareness and elevating these voices, one goal is to make connections between these stories and the other course materials. Another goal is to make connections between culture and food science. Watch the video and answer these questions:

1. Have you heard of George Washington Carver before? If so, where?
2. How does this video relate to culture (either culture in general or food culture)?
3. In this video, and in many references to his education and accomplishments, George Washington Carver is referred to as a botanist, plant scientist, and agricultural scientist. Do a little more research about his work online - How does his work relate to food science?
4. What were your top two takeaways (what stood out to you) from this video and/or what you found online about George Washington Carver?

Initial Analysis [PromptBot]

- The prompt is focused on personal reflection but has elements that could easily be answered by AI
- Questions are relatively straightforward and could be answered without watching the video
- There are limited requirements for personal connection or specific video timestamps
- It is missing elements that require direct engagement with the video

Prompt Engineering Tips for AI-resistant assignments [PromptBot]

1. Time-specific references (timestamps, quotes)
2. Personal experiences
3. Course-specific connections
4. Before/after comparisons
5. Real-time observations
6. Require the following elements in an assignment to make it more challenging to generate generic AI responses while encouraging genuine engagement with the material.

View the edited assignment on the following page.

Food Science Reflection: Highlighting Diverse Voices in Our Field

Pre-viewing Task:

Before watching the video about George Washington Carver, briefly note your current knowledge about him (2-3 sentences). This will be compared with your post-viewing insights.

Video Analysis & Personal Reflection:

Watch the video carefully and include the following in your reflection:

1. Time-Specific References:
   - Identify 2 specific moments in the video (include timestamps) that challenged or expanded your previous understanding of Carver's work
   - Quote a specific statement from the video that you found particularly impactful, noting the timestamp and explaining why it resonated with you

2. Cultural Connections (choose 2):
   - Connect a specific example from the video to your own cultural background or food traditions
   - Describe how Carver's approach to agricultural education reflects cultural sensitivity in scientific communication
   - Analyze how Carver's innovations addressed specific cultural or societal needs of his time

3. Food Science Integration:
   - Select one specific scientific technique or discovery mentioned in the video
   - Explain how this connects to a concept we've covered in class (be specific with course material references)
   - Describe how this historical contribution influences modern food science practices

4. Personal Growth Reflection:
   - Compare your pre-viewing knowledge with what you learned
   - Share a specific way this video has influenced your perspective on diversity in food science
   - Propose one way you could apply Carver's innovative thinking approach to a current food science challenge

Requirements:

- Include at least 3 specific timestamps from the video to support your points
- Reference at least 1 specific concept from our course materials
- Responses should reflect your unique viewpoint and personal engagement with the material