# Comparing Al-Generated Questions using Bloom's Taxonomy

Chat GPT has been at the center of discussion about AI tools and their use in Higher Education. Two other tools, Microsoft's Bing Chat and Google's Bard, are now widely available for use. One way to compare the effectiveness of each tool is to prompt each to respond to the same question. Here is how to access each of the tools:

- Chat GPT requires a free account with Open AI: <a href="https://openai.com/">https://openai.com/</a>
- Bing Chat can be accessed using your Office 365 credentials: <a href="https://www.bing.com/">https://www.bing.com/</a>
- Bard can be accessed using your Google credentials: <a href="https://bard.google.com/">https://bard.google.com/</a>

In this article, each tool was prompted to generate questions for each level of Bloom's Taxonomy in relation to Martin Luther King, Jr's "I Have a Dream" speech. Before reviewing the responses, note the following:

- Chat GPT generated only one question for each Bloom's level as directed, while Bard generated several questions for each. Bing allows you to generate responses in one of three different conversation styles precise, balanced, and creative. The prompt was asked three separate times, one for each conversation style.
- Bard did not generate questions for this level of Bloom's with the first prompt. The questions for the Create level of Bloom's were developed after a second prompt.
- At the end of each response, Bing generated a list of sources for the reaction. Bard also gives a Google It button at the end of the response. Clicking generates hyperlinks to related sources.

After reviewing the responses, please take a few moments to respond to the five-question <u>survey</u> at the end of this article.

Now, let's see how each tool responded to the prompt: Can you write a question from each level of Bloom's taxonomy that relates to Martin Luther King Jr's "I Have a Dream" speech? This should be a total of six questions.

The responses are grouped by Bloom's level for easy comparison.

#### REMEMBER

Chat GPT Response: What was the main message or theme of Martin Luther King Jr's "I Have a Dream" speech?

#### Bard Response

- What was the main purpose of Martin Luther King Jr's "I Have a Dream" speech?
- What are some specific examples of racism that King mentions in his speech?
- What are some ways King's dream has been realized in the United States since 1963?

## Bing Chat Response

- Precise: What are some key phrases or quotes from Martin Luther King Jr's "I Have a Dream" speech?
- Balanced: What is the main idea of Martin Luther King Jr's "I Have a Dream" speech?
- Creative: What are some of the historical events or figures that King mentions in his speech?

## **UNDERSTAND**

Chat GPT Response: Can you summarize Martin Luther King Jr's dream for racial equality and justice as described in his speech?

# Bard Response:

- Explain how King's use of repetition and metaphor helps to make his speech more powerful.
- What is the significance of the date on which King delivered his speech?
- What are some of the challenges that still remain in achieving King's dream of racial equality?

# Bing Chat Response

- Precise: What was the main message of Martin Luther King Jr's "I Have a Dream" speech?
- Balanced: How does Martin Luther King Jr use rhetorical devices in his "I Have a Dream" speech?
- Creative: What is the main message or purpose of King's speech?

#### APPLY

*Chat GPT Response*: How did Martin Luther King Jr's "I Have a Dream" speech inspire or influence the Civil Rights Movement in the United States?

#### Bard Response:

- How can you use King's words to inspire others to work for social justice?
- What specific actions can you take to help make King's dream a reality?
- How can you help to create a more just and equitable society for all people?

# Bing Chat Response

- *Precise*: How can the principles outlined in Martin Luther King Jr's "I Have a Dream" speech be applied to current social issues?
- Balanced: What is the significance of Martin Luther King Jr's "I Have a Dream" speech in the context of the Civil Rights Movement?
- *Creative*: How can you use King's speech to inspire or persuade others to fight for justice and equality?

## **A**NALYZE

*Chat GPT Response:* What rhetorical devices and persuasive techniques did Martin Luther King Jr use in his speech to effectively convey his message?

## Bard Response:

- What are some of the different ways King's speech has been interpreted?
- What are some of the strengths and weaknesses of King's arguments?
- How has King's speech influenced the course of American history?

## Bing Chat Response

- *Precise*: How does Martin Luther King Jr use rhetorical devices in his "I Have a Dream" speech to convey his message?
- Balanced: How does Martin Luther King Jr's "I Have a Dream" speech relate to the Emancipation Proclamation?
- *Creative*: How does King use rhetorical devices such as metaphors, repetition, or parallelism to enhance his speech?

#### **EVALUATE**

Chat GPT Response: Assess the impact of Martin Luther King Jr's "I Have a Dream" speech on the advancement of civil rights in the United States. What lasting changes did it bring about?

# Bard Response:

- Do you believe King's dream of racial equality has been realized in the United States?
- What are some of the factors that have contributed to the progress (or lack thereof) in achieving King's dream?
- What are your hopes and dreams for the future of race relations in the United States?

#### Bing Chat Response

- *Precise*: How effective was Martin Luther King Jr's "I Have a Dream" speech in advancing the Civil Rights Movement?
- Balanced: What is the impact of Martin Luther King Jr's "I Have a Dream" speech on American society?
- Creative: How effective is King's speech in achieving his goals and addressing his audience?

#### CREATE

Chat GPT Response: Imagine you have the opportunity to deliver a speech about a social issue that you are passionate about. How would you incorporate the persuasive techniques and powerful imagery used by Martin Luther King Jr in his "I Have a Dream" speech to inspire others?

## Bard Response:

- Create a new slogan or motto that reflects the message of Martin Luther King Jr's "I Have a Dream" speech.
- Write a poem or song that expresses your hopes and dreams for the future of race relations in the United States.
- Design a poster or flyer that encourages people to work for social justice.
- Create a new social media campaign that raises awareness of the challenges facing people of color in the United States

## Bing Chat Response

- *Precise*: Can you write a short essay discussing how Martin Luther King Jr's "I Have a Dream" speech has influenced society today?
- Balanced: How does Martin Luther King Jr's "I Have a Dream" speech inspire people today?
- Creative: What would you say in a speech that continues King's vision for the future of America?

Now that you have compared responses from the three AI tools, think about the possibility of using the tool to create assignments with open-ended questions using Bloom's Taxonomy and which tool might work best for your course. You are invited to share your feedback and ideas via the following five-question survey: https://forms.office.com/r/jU8dhbG2Ud.