**Student Version**

**Assignment Name:** AI-Assisted Essay Writing: Enhancing the Cognitive Process

**Purpose**

The core objective of this assignment is to harness the power of generative artificial intelligence (AI) like ChatGPT to enhance your critical thinking and analytical skills when constructing an essay. Rather than using AI as a crutch to generate content, you will engage with the AI to refine your ideas, challenge your assumptions, and expand your understanding. This process promotes a higher level of intellectual engagement with your topic and fosters the development of sophisticated arguments and theses. By doing so, you will improve your critical thinking, technological literacy, and intellectual independence.

**Skills**

This assignment will help you to develop:

* Analytical thinking by questioning and refining your essay's thesis with AI assistance.
* Cognitive flexibility by considering multiple viewpoints suggested by AI.
* Argument development through iterative feedback with an AI tool.
* Research skills as you validate information provided by AI and incorporate it appropriately.
* Self-evaluation by using AI to test the strength of your arguments.
* Technological proficiency by using AI in a way that enhances human intelligence.

**Knowledge**

You will become familiar with:

* Constructing complex arguments and developing a thesis in essay writing.
* The capabilities and limitations of AI in generating content and providing feedback.
* The importance of critical thinking and personal input in the writing process.

**Steps**

1. **Topic Selection**:
   * Identify a compelling topic or question that you wish to explore in your essay. This topic might be connected to things you have read, your life experiences, or things you have been pondering about.
   * Have a discussion with AI about the feasibility of writing a high-quality essay on your topic. Your discussion should include at least 5 exchanges (5 prompts and 5 AI responses) with the AI, with each prompt building on the prior AI response.
   * Create a link to or screenshot of your AI discussion.
2. **Identify Sources of Information**:
   * Ask AI for at least three sources that you can use to read about your topic. Keep in mind that sometimes AI hallucinates (makes up) those sources. You can also use library databases or google scholar to identify sources.
   * Have a discussion with AI about the quality of your chosen sources. If needed, choose different sources, again discussing their quality with AI, until you have three sources you feel good about.
   * Create a link to or screenshot of your AI discussion(s) and create a list of your chosen sources.
3. **Learn about Your Topic**:
   * In a word document, brainstorm a list of what you already know about the topic, before doing your readings, that you think may be helpful to your essay.
   * Read your sources, taking notes about the most important ideas you learned in the word same word document, adding parenthetical citations for the source from which you learned each idea.
   * Copy and paste your document into AI and ask it to tell you whether the material reflects a thorough coverage of your topic or if it has feedback to offer.
   * Create a link to or screenshot of your AI discussion(s),
   * Respond to the AI feedback, as needed, by reading more on your topic, adding any information to your word document. Be careful not to trust an AI provided facts without confirmation from a reputable source.
4. **Create a Thesis and an Argument**:

* From your gathered information, come up with a thesis statement and at least three supporting arguments.
* Have a discussion with AI about your thesis and arguments, responding to each round of feedback until you are happy with the thesis and arguments and AI does not give any more suggestions that you feel are necessary to address. As part of your discussion, ask the AI to provide counterarguments or alternative viewpoints.
* Create a link to or screenshot of your AI discussion(s).

1. **Organize Your Ideas**:
   * From your thesis and arguments, create an outline for your essay.
   * Copy and paste your outline into AI and ask it to make suggestions.
   * Address any AI suggestions that you feel are good, then ask the AI for more feedback.
   * Repeat the cycle until you are happy with your outline and AI is not making suggestions that you feel are necessary.
   * Create a link to or screenshot of your AI discussion(s).
2. **Write Your Essay:**
   * Write your essay, using your final outline.
   * Copy and paste your essay into AI and ask it to make suggestions.
   * Address any AI suggestions that you feel are good, then ask the AI for more feedback.
   * Repeat the cycle until you are happy with your essay and AI is not making suggestions that you feel are necessary.
   * Create a link to or screenshot of your AI discussion(s).
3. **Reflect:**
   * Write a reflective commentary on how the AI interaction contributed to the development of your essay, including how it:

A. Influenced the direction or depth of your argument.

B. Highlighted weaknesses or strengths in your reasoning.

C. Offered novel insights or perspectives you had not considered.

**Criteria for Success**

* A comprehensive and well-structured essay outline that integrates AI-facilitated insights.
* A thoughtful reflective commentary that critically assesses the influence of AI on the essay's development.
* Demonstrated ability to integrate AI interactions constructively and critically into the writing process.

Examples of successful projects include:

1. An essay exploring the ethical implications of AI in the workforce, enhanced by a ChatGPT-generated debate on the matter.
2. An analysis of climate change policy, with ChatGPT used to challenge the student’s proposed solutions and refine their policy recommendations.

| **Criteria** | **Excellent (A)** | **Good (B)** | **Satisfactory (C)** | **Needs Improvement (D/F)** |
| --- | --- | --- | --- | --- |
| **1. Topic Selection** | Topic is compelling and well-defined. Discussion with AI is thorough, showcasing critical engagement. | Topic is adequately compelling. Discussion with AI is complete with minor gaps in critical engagement. | Topic is somewhat compelling. Discussion with AI is superficial but meets the minimum requirement. | Topic is not compelling. Discussion with AI is incomplete or lacks critical engagement. |
| **2. Identify Sources** | At least 3 credible sources identified. Quality discussion with AI is insightful and thorough. | 3 sources identified, discussion with AI shows understanding of source quality but may lack depth. | 3 sources identified, discussion with AI is basic and meets minimum requirements. | Fewer than 3 sources or no discussion with AI. Sources may be unreliable. |
| **3. Learn About Your Topic** | Knowledge base is extensive. AI feedback is utilized effectively to cover topic thoroughly. | Knowledge base is strong. AI feedback is utilized, but coverage may have minor gaps. | Knowledge base meets minimum requirements. AI feedback is acknowledged but not effectively utilized. | Knowledge base is weak or inaccurate. AI feedback is ignored or misunderstood. |
| **4. Thesis and Argument** | Thesis is clear, compelling, and well-supported. AI feedback enhances argument quality significantly. | Thesis is clear, with good support. AI feedback is used to refine argument to a good standard. | Thesis is adequate with sufficient support. AI feedback is considered but not fully integrated. | Thesis is unclear or unsupported. AI feedback is not effectively utilized. |
| **5. Organize Ideas** | Outline is detailed and logical. AI suggestions are integrated effectively, enhancing the essay structure. | Outline is clear and mostly logical. AI suggestions are integrated and improve the essay structure. | Outline meets basic requirements. AI suggestions are considered but not thoroughly integrated. | Outline is unclear or incomplete. AI suggestions are not utilized or are misapplied. |
| **6. Write Your Essay** | Essay is well-written, following the outline closely. AI suggestions are used to refine the essay to excellence. | Essay is clear and follows the outline. AI suggestions lead to noticeable improvements. | Essay meets basic standards and follows the outline. AI suggestions lead to some improvements. | Essay is poorly written or does not follow the outline. AI suggestions are ignored or poorly implemented. |
| **7. Reflect** | Reflection is insightful, showing deep understanding of AI's role in enhancing the essay. | Reflection shows good understanding of AI's contribution, with some insight. | Reflection meets the basic requirements but lacks depth. | Reflection is superficial or missing, with little to no understanding of AI's role. |

**Instructor Version**

**Assignment Name:** AI-Assisted Essay Writing: Enhancing the Cognitive Process

**Purpose**

The core objective of this assignment is to harness the power of generative artificial intelligence (AI) like ChatGPT to enhance the student’s critical thinking and analytical skills when constructing an essay. Rather than using AI as a crutch to generate content, the student will engage with the AI to refine their ideas, challenge their assumptions, and expand their understanding. This process promotes a higher level of intellectual engagement with their topic and fosters the development of sophisticated arguments and theses. By doing so, they will improve their critical thinking, technological literacy, and intellectual independence.

The assignment is envisioned as a research-based essay to be completed as a final assignment for a course. The student should have had some previous exposure to generative AI (ChatGPT) and to essay writing. The assignment can be used in any course that uses essay writing or could be adapted to writing shorter papers or papers that do not require research.

**Skills**

This assignment will help the student to develop:

* Analytical thinking by questioning and refining their essay's thesis with AI assistance.
* Cognitive flexibility by considering multiple viewpoints suggested by AI.
* Argument development through iterative feedback with an AI tool.
* Research skills as they validate information provided by AI and incorporate it appropriately.
* Self-evaluation by using AI to test the strength of their arguments.
* Technological proficiency by using AI in a way that enhances human intelligence.

**Knowledge**

You will become familiar with:

* Constructing complex arguments and developing a thesis in essay writing.
* The capabilities and limitations of AI in generating content and providing feedback.
* The importance of critical thinking and personal input in the writing process.

**Steps**

The steps in the “Student Version” can be adapted and revised to meet instructor preferences or learning objectives for the course. For example:

1. Topic Selection: The instructor might give specific direction about the topic or the type of topic the student is to write about.
2. Identify Sources of Information: The instructor might specify what types of sources should be used or might change the number of required sources.
3. Learn about Your Topic: Again, the instructor might specify the types of sources to be used.
4. Create a thesis and an argument: The instructor might add specific criteria.
5. Organize your ideas: The instructor might prefer a specific organizational approach or might allow the student to have the AI organize the essay.
6. Write your essay: The instructor might specify a certain length to the paper or add a requirement for peer-review of the essay.
7. Reflect: The instructor might have the students orally present their reflections or add criteria.