

Smart and Responsible AI Use: *A Student's Guide*





Artificial Intelligence (AI) has rapidly become an integral part of the academic landscape, offering both opportunities and challenges for students. This guide aims to provide a concise, but comprehensive guide on both the ethical and effective use of AI tools in academic settings. By following these best practices, students can harness the power of AI to enhance their learning experience while maintaining academic integrity and developing crucial critical thinking skills.

Understanding AI's Role in Education

First, let's acknowledge that whether we like it or not, AI is quickly reshaping academia and our daily lives. In order to make the most of it we must recognize it for what it is: a powerful tool, like a calculator or a grammar handbook, not as a substitute for genuine understanding or intellectual growth.

Education is more than just passing a test; it's about expanding knowledge and developing skills that will support you both in your personal life and career. Sure, AI can spit out answers faster than you can say "ChatGPT," but that's not the whole story. To make the best use of AI, you have to flex those mental muscles yourself by breaking down problems, connecting the dots, coming up with your own ideas - that's the stuff AI can't do for you, and it's no coincidence that those are the skills that will serve you the most beyond college. AI is here to stay, so yes, use it...but use it *wisely*.

Consider this your quick guide for doing just that.

A.I. will force us humans to double down on those talents and skills that only humans possess. The most important thing about A.I. may be that it shows us what it can't do, and so reveals who we are and what we have to offer. ~New York Times

But First, Let's Talk Ethical Considerations

Academic Integrity Policies

Familiarize yourself with your institution's overall academic integrity policies and each of your instructors' policies regarding AI use. Many universities are developing specific guidelines for AI tools and ignoring these policies could result in serious academic consequences. Additionally, be sure to stay up-to-date with your institution's policies on AI use; they will evolve as the technology advances and institutions adapt.

Proper Citation of AI-Generated Content

If you use AI-generated content in your work, it's important to cite it properly. Think of AI tools as you would any other information source. Not sure how to do this? Ask your instructors or your school's writing center for advice. They can guide you on when and how to attribute AI-generated content, and explain the potential consequences of using AI without proper citation.

Transparency with Instructors

On that note, be honest and transparent with your instructors about how you're using AI tools. Many instructors are curious about how students are working with these new technologies, and many are using AI themselves to enhance their own course materials. They might surprise you with helpful tips on how to use AI effectively in your coursework. Plus, being honest builds trust and shows you're thinking critically about your learning process and are committed to a genuine educational experience.



Effective Use Cases

Brainstorming and Ideation

AI can be an excellent tool for generating initial ideas, outlines, or exploring different perspectives on a topic. Use it to kickstart your thinking process or to overcome writer's block. However, remember that AI-generated ideas should be a starting point, not your final product. Take these suggestions and build on them with your own critical thinking and unique insights.

The more effective, and increasingly popular, strategy is to tell the algorithm what your topic is and ask for a central claim, then have it give you an outline to argue this claim. Then rewrite them yourself to make them flow better. ~*Chronicle of Higher Ed*

Research Assistance

AI can help you find relevant sources, summarize complex texts, or explain difficult concepts. However, it's important always verify information from reliable academic sources if you are using a generative AI platform like ChatGPT or Gemini. Some AI tools like those integrated into Hawkes Learning's student software have taken a curated content approach to feedback to filter information from a reliable source, limit distractions, and ensure that feedback is being used to further understanding rather than spoon-feed answers.

Writing Support

Use AI to help create drafts, revise sentences, or suggest ways to improve your writing style. These tools can offer fresh perspectives and help structure your thoughts more clearly. The key is to use AI-generated content as a starting point. Review and refine this content to ensure it accurately represents your ideas and meets your assignment's requirements. Your final product should always reflect your own voice and understanding.

Problem-Solving in STEM Fields

In science, technology, engineering, and mathematics courses, AI can assist with complex calculations, provide step-by-step problem-solving guidance. This can be particularly useful when tackling challenging concepts or working through intricate problems. Hawkes Learning, for instance, offers personalized learning paths and immediate feedback, helping you master STEM concepts at your own pace. The real value comes from using these technologies as supplementary tools to enhance your learning and problem-solving skills.

10 Best Practices for Using AI in Academia

1. Verify Information

Always fact-check information provided by AI using reputable academic sources. It's important to develop a habit of critical evaluation by cross-referencing AI outputs with peer-reviewed journals, books, and other trustworthy materials.

2. Consider the Context

AI can sometimes provide information that is outdated or contextually inaccurate. Always ensure the information is relevant to your specific area of study and tweak the prompt if necessary. Remember, there is no replacement for critical thinking.

3. Enhance, Don't Replace

Use AI to tweak and refine your work, not to generate entire assignments. The goal is to produce work that reflects your own understanding and effort. You do yourself a disservice by bypassing the effort and practice required for producing quality content. AI can help to clarify concepts and help you approach problems from a new angle but ensure that the final work is predominantly your own intellectual effort.

4. Develop Effective Prompts

Learn to craft prompts that encourage deeper thinking and more nuanced responses from AI tools. Try different phrasing, ask follow-up questions, and don't settle for the first response. Tweak your prompts to push the AI for more detailed and insightful answers.

5. Review and Refine

Use AI-generated responses as a launchpad for your own thoughts or exploration. Begin with these responses and refine them to better fit your assignment requirements, personal writing style, and level of understanding.



6. Use AI for Learning, Not Just Completing Tasks

Engage with AI in a way that promotes your understanding. Ask for explanations, request different approaches to problems, and use AI to explore topics more deeply. Examples of these prompts may include:

- “Provide an in-depth analysis of this concept and discuss its implications.”
- “Can you elaborate on that?”
- “Compare and contrast these two theories/ideas.”
- “How can this method/approach be applied in a real-world scenario?”
- “What are some innovative solutions to this problem?”

7. Reflect on Feedback

Utilize AI tools like Hawkes Learning’s innovative “Explain-Error” feature to reflect on feedback provided for your assignments. This AI capability not only identifies errors but also offers detailed explanations and tailored corrective steps. Engaging with this feedback enhances your critical thinking skills, deepens your understanding of course concepts, and helps you identify strengths and areas for improvement. By incorporating AI-driven feedback into your study routine, you can learn from mistakes in real-time, fostering continuous academic growth and mastery.

8. Balance Technology with Traditional Methods

Avoid relying solely on AI tools. Integrate traditional methods of studying, such as reading books and engaging in group discussions for a more well-rounded approach to learning. These methods are irreplaceable in terms of deepening your understanding and critical thinking abilities.

9. Maintain Transparency

Maintaining transparency is crucial when using AI in education. Students should understand how AI tools work, what data they collect, and how that data is used. Transparency fosters trust and helps students make informed decisions about the technology they use. It’s important to choose AI tools that clearly explain their algorithms and data privacy policies, ensuring that their educational journey is enhanced safely and ethically.

10. Stay Informed

Familiarize yourself with your institution’s overall academic integrity policies and each of your instructors’ policies regarding AI use. Many universities are developing specific guidelines for AI tools and ignoring these policies could result in serious academic consequences. Additionally, keep abreast of any changes in these policies as they will likely evolve as technology advances and institutions adapt.

In Conclusion

The integration of AI in higher education presents exciting opportunities for enhanced learning and productivity. However, it's crucial to approach these tools with a clear understanding of their proper use, limitations, and ethical considerations. By following the best practices outlined in this guide, students can leverage AI to support their academic journey while maintaining integrity, developing critical skills, and preparing for a future where AI will likely play an increasingly significant role.

Remember, the goal of higher education is not just to complete assignments or earn passing marks, but to develop the knowledge, skills, and critical thinking abilities that will serve you throughout your life and career. Use AI as a tool to support this goal, not as a shortcut around it.

FUN FACT...

Surprise! This very guide was drafted with a little help from our AI friends, Claude AI and ChatGPT. We put our own advice into action, using AI as a collaborative tool throughout the writing process for brainstorming and refining ideas, all while maintaining human oversight and critical thinking.

The takeaway? AI can be a powerful ally in academia and beyond when used thoughtfully and ethically. So don't shy away from it – embrace AI in your studies and work. Just remember to use it wisely, always keeping your own intellectual growth and critical thinking skills at the forefront. After all, the goal is to enhance your abilities, not replace them.

