Professional Use of Generative AI at UK
Best Practices and Use Cases

Generative artificial intelligence (AI) tools continue to proliferate since their initial release in late 2022. These include Copilot, ChatGPT, Gemini, Claude, Perplexity, Mistral, Grok, Llama, Gemma, DeepSeek, Firefly, Midjourney, Stable Diffusion, as well as many other proprietary and open-source tools with both general and specialized applications. Generative AI has also been integrated into software such as Microsoft 365, the Google suite, Adobe and web browsers.

Because generative AI tools can be applied in any area, their effectiveness varies based on the type of work, the use case and other contextual factors. There is no single answer as to which generative AI tool and strategy is most effective across all work tasks and professional practice. Additionally, generative AI tools are developing at a rapid pace; their capabilities and the issues they raise may change over time.

Below is a list of best practices that synthesize the UK ADVANCE guidelines for instruction, research and clinical care, and additionally draw from AI literacy frameworks that inform those guidelines and can be found in the UK ADVANCE guidelines for instruction.

These best practices are based on our best understanding of the field at the time and may be updated as needed. UK ADVANCE is available to consult with individuals and units by reaching out via email to ukadvance@uky.edu.

Best Practices

- **Clarify expectations for generative AI use in your area.** While UK ADVANCE has issued guidance for generative AI in education, research and clinical care, it is important to clarify expectations in one's office, unit or organizational area. Having regular and transparent conversations around generative AI use can lend clarity and consistency to expectations across the unit.

- **Develop your understanding and skills.** Understanding the basics of generative AI, sometimes described as AI literacy, allows us insight into the affordances and limitations of generative AI tools, as well as the opportunities and concerns that the technologies raise. Moreover, generative AI tools are much more effective when we develop our skills in using them for the specific tasks and purposes that we regularly pursue in our work.

- **Be aware of when and how you're using generative AI tools.** While ChatGPT and similar AI tools run on their own self-titled apps and websites, other tools and software now include generative AI functions. Seek guidance if you're unsure whether software is accessing or sending data to a generative AI tool. Normal use of an application such as web browser or email client, for example, may not present any issues, while using a built-in generative AI feature may send data from the current webpage or a message to a third party.

- **Maintain transparency around generative AI use.** In addition to regularly discussing the implications of generative AI for one's own professional area and line of work, it will be important to indicate when and how generative AI has been used to contribute to projects, decisions, etc. Transparency differs by context and can range from verbal check-ins to brief, written statements and full methodological explanations. Transparency also includes a sense of how generative AI is used across the entire unit or group and includes all relevant stakeholders.

- **Maintain data privacy and confidentiality.** Regulations such as the Family Educational Rights and Privacy Act (FERPA), the Health Insurance Portability and Accountability Act (HIPAA) and UK's Administrative Regulations specify what and how data should be protected in particular ways in different circumstances. Unless a generative AI tool is maintained on a UK-protected server or by a vendor with which UK has a contract, anything typed or uploaded into the tool (or to which the tool is given access) is being shared "outside" our organization. In addition to information that is implicated by regulatory compliance, other information may be considered confidential or inappropriate to input into or share with third-party generative AI tools.

- **Make sure you're able to "own" what you're doing.** While generative AI tools can augment and, in some cases, automate tasks, it is critical to maintain human oversight, agency and accountability. Whether it's attesting to the accuracy or rationale of your work or ensuring that any decision is made with the appropriate oversight, we should maintain the "human in the loop" when using generative AI. Overall, we should continue to think critically and develop our own skills and expertise while using generative AI.

- **Evaluate the impact of generative AI use in your work.** While generative AI tools offer opportunities to enhance our work, they also might affect it, as well as those whom our work impacts, in other ways. Use generative AI tools reflectively and monitor how they impact you, your work and the stakeholders that your work implicates.

Example Use Cases

Communication and Productivity

- Generating ideas for content or communication strategy
- Generating or adapting templates for professional communication
- Outlining, organizing or structuring documents
- Synthesizing notes and other information into summaries
- Generating a first draft for human revision and approval
- Editing language for the situation or audience (e.g., "tone management")
- Giving feedback on a written draft
- Revising, copyediting or proofreading a written draft

Learning and Comprehension

- Exploring topics and concepts for further research and verification
- Analyzing documents, texts and other materials
- Generating questions or interactions to deepen understanding of a topic

- Identifying strategies and resources for learning and comprehension
- Exploring different perspectives or viewpoints
- Simulating different scenarios for practice and skill-building
- Developing evidence-based plans for improvement

Working with Data

- Identifying trends and other insights from datasets
- Offering insights, strategy and feedback on data
- Generating summaries or visualizations of data
- Translating datasets into other formats
- Composing code or commands to query or manipulate data
- Assisting with data cleaning, validation and entry
- Lending consistency to documentation

Example Vignettes

Communication and Productivity

A professional staff member is working with several faculty members in their college to develop a brief training program intended for a general adult population. As the project manager, they are responsible for collecting and integrating the faculty members' specialized instructional media into a program designed for a non-specialist audience. Once they have arranged the elements of the training program in a sequence, the project manager approaches each faculty member to ask for their permission to use a generative AI tool to adjust the language and presentation of the instructional media to fit the needs of the audience. There are no issues with ownership nor confidentiality, and the team decides to proceed. After using the generative AI tool to transform the instructional text and other media into a more non-expert-friendly approach, the project manager also generates further supporting resources, such as a glossary, and asks the generative AI tool to suggest any changes to the structure and format of the program to accommodate a wide range of audience needs. The team reviews what the generative AI tool has produced and makes some adjustments to ensure the accuracy and appropriateness of the content and that it is aligned with the project goals and institutional identity. The project manager includes a clear statement in the training program materials as to how generative AI was used.

Learning and Comprehension

A professional staff member in a regional office is tasked with updating their team on the implications of a newly revised regulatory document for their work. The document is lengthy and written in specialized and dense language that is difficult to comprehend concretely. Moreover, as with all regulatory documents, it requires interpretation to connect it with the specific context of the staff member's team. The regulatory document is publicly posted and not protected by copyright. Because all work with generative AI requires some kind of grounding context, the staff member studies the document carefully and attempts to make sense of it in the context of their work. To better understand the document, the staff member then uploads it into a generative AI tool and instructs the tool to act as a conversation partner to help them better understand the document. In addition to asking about difficult or ambiguous areas that the staff

member noted during their read of the document, they also propose interpretations based on particular needs of their team's work context. In addition to these interactions, they also ask the generative AI tool for further recommendations to understand the document, and it directs them to a useful resource. In presenting their insights to their team, they make clear that they used a generative AI tool to assist them in understanding the document and its implications and are careful to note any areas where they remain unsure or still have questions for the rest of the team to assist them in pursuing. Because the team has had previous conversations about how generative AI can be used appropriately and effectively for their work, this is not surprising nor concerning to the team.

Working with Data

An office assistant is tasked with sending a communication to a particular subset of employees in their organization, and the list of email addresses that they are provided contains a critical error. It is a CSV spreadsheet file of the email addresses, but all of them lack the ".edu" suffix for a UK email address. Knowing that the email list was generated by a specific software and it is unlikely that the person who provided the list will be able to correct the issue quickly, the assistant uploads the CSV file into a generative AI tool and asks it to append the correct suffix to all email addresses without altering them otherwise. There are several hundred email addresses in the list, which would have taken a long time to correct manually.

An office coordinator is responsible for analyzing and communicating insights on the past year's voluntary and anonymous feedback on the services their department provides. The feedback contains no identifying information, no proprietary nor sensitive data and will be used only for improvement of services. The coordinator first studies the feedback, which consists of roughly 300 brief responses to three questions. They make notes on apparent themes, opportunities for improvement and other noteworthy responses. Then, after discussing it with their supervisor, they upload the feedback data into a generative AI tool and explain their needs. Because they are particularly cautious, they do not specify the name of their office or organization during their interaction with the generative AI tool. The coordinator asks it to study the responses and note themes, improvement opportunities and other takeaways, comparing all of the tool's output to their own insights. Where there is disagreement or non-overlapping ideas, they further interact with the tool to gain perspective and enhance their overall understanding of the feedback. They deliver their report with takeaways and recommendations to their supervisor with a brief statement about the use of generative AI, which will not take their supervisor by surprise given that it was already discussed.