

Some Thoughts on Judging Projects Utilizing AI

Introduction

As strong as the policy is, its success will ultimately depend on how it is interpreted and implemented during adjudication. Several areas would benefit from additional framing or clarification, not because the policy is unclear, but because judges are being asked to apply it in real time with students who have used AI in varied and sometimes subtle ways.

Judges may benefit from shared terminology regarding authorship, clearer ways of thinking about AI use throughout the project timeline, and explicit attention to copyright as it relates to what students provide to AI tools.

Judge-facing guidance to support consistent interpretation

Locating where AI entered the process

When AI use is disclosed, a helpful starting point is to locate when it entered the student's process. AI used early to explore background concepts, brainstorm possible approaches, or clarify terminology plays a different role than AI used later to generate explanations, figures, or conclusions.

In practice, judges may encounter two students who both disclose AI use but demonstrate very different relationships to their work. One student might say they used AI to brainstorm variables, then chose what to test, revised their design after early results, and can explain why their conclusions matter. Another might say they used AI to help "explain the results," but struggle to account for the explanation on their board. The policy clearly values student ownership, but without shared language around authorship, judges may end up making different calls on cases that feel similar in spirit, even if they look different in practice. A common understanding of authorship as decision-making and interpretive responsibility helps judges distinguish between support and substitution without focusing on the tool itself.

Attending to decision-making rather than polish

Across grade levels, students who have authored their work tend to explain why they made particular choices, what they changed after outcomes did not work, and what they learned from unexpected results.

Students who have authored their work also tend to speak comfortably about surprises. Unexpected results are not treated as failures, but as moments that prompted new questions or changes in thinking. A student might explain that the data did not support their hypothesis, that a variable behaved differently than expected, or that an early assumption turned out to be wrong. These reflections usually come with some insight into how the student interpreted what happened and what they learned as a result.

When AI has been used appropriately, this pattern still holds. Students who used AI as a support tool can usually explain how they evaluated suggestions, what they decided not to use, and how

their own thinking evolved alongside the tool. Their explanations sound personal and specific, rather than generic or rehearsed. They are able to connect decisions to outcomes in a way that reflects ownership. By contrast, when core intellectual work has been outsourced, explanations often remain at the surface level. Students may repeat polished language without being able to unpack it, or struggle to explain why certain choices were made. Judges do not need to play detective or try to infer intent. Most of the time, the difference shows up naturally in how students talk about their work.

Distinguishing support from substitution

The policy appropriately allows AI to support learning, organization, and understanding. Challenges arise when AI substitutes for core intellectual work that students are expected to do themselves. The issue is rarely that AI is present. It's whether the student is still doing the thinking the project is meant to showcase.

Challenges arise when AI moves from supporting learning to substituting for core intellectual work that students are expected to do themselves. This includes generating interpretations of results, constructing explanations for the project board, or drawing conclusions that the student cannot independently justify. In these cases, the concern is not that AI was used, but that the student's own reasoning and judgment are no longer clearly evident in the work under evaluation.

For judges, the key question is whether the student can account for the ideas being presented. A student who used AI as support can usually explain why they made certain choices, what they accepted or rejected from AI suggestions, and how they arrived at their conclusions. A student who relied on AI as a substitute often struggles to move beyond surface-level repetition. This distinction allows judges to focus on authorship and understanding rather than on the presence of a particular tool.

Considering copyright through AI inputs

Copyright considerations are most relevant when thinking about what students provided to an AI system, not just what the system produced. For example, an image generated entirely from a student-written text prompt is fundamentally different from an image generated by uploading a textbook diagram, a journal article figure, a lab manual, or a proprietary photograph. Even if the final image appears highly transformed, providing copyrighted material to an AI system without permission can still raise concerns, particularly when the resulting work is publicly displayed or shared online.

This distinction matters because students may assume that AI "washing" or transforming material automatically renders it safe to use. In reality, the ethical and copyright questions often hinge on whether the student had the right to use the material they fed into the tool, not just on whether the final product looks original. A student who generates text, figures, or visuals from scratch using their own prompts is typically in a very different position from a student who uploads protected content and asks the AI to rework it.

For judges, this does not mean conducting a legal review. It means listening for whether AI was used as a generative support based on the student's own ideas, or as a transformation layer applied to material the student did not create or have permission to use. That awareness helps protect students, the fair, and the integrity of the work being displayed.

Closing reflection

Taken together, the policy and supporting materials provide a strong foundation for ethical, transparent, and educationally meaningful AI use in the competition

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Appendix

The AI Assignment Scale

Level	Description
NO AI	The assignment is completed entirely without AI assistance in a controlled environment, ensuring that students rely solely on their existing knowledge, understanding, and skills. You must not use AI at any point during the assessment. You must demonstrate your core skills and knowledge.
AI PLANNING	AI may be used for pre-task activities such as brainstorming, outlining and initial research. This level focuses on the effective use of AI for planning, synthesis, and ideation, but assignments should emphasize the ability to develop and refine these ideas independently. You may use AI for planning, idea development, and research. Your final submission should show how you have developed and refined these ideas.
AI COLLABORATION	AI may be used to help complete the task, including idea generation, drafting, feedback, and refinement. Students should critically evaluate and modify the AI suggested outputs, demonstrating their understanding. You may use AI to assist with specific tasks such as drafting text, refining and evaluating your work. You must critically evaluate and modify any AI-generated content you use.
FULL AI	AI may be used to complete any elements of the task, with students directing AI to achieve the assignments goals. Assignments at this level may also require engagement with AI to achieve goals and solve problems. You may use AI extensively throughout your work either as you wish, or as specifically directed in your assignment. Focus on directing AI to achieve your goals while demonstrating your critical thinking.
AI EXPLORATION	AI is used creatively to enhance problem-solving, generate novel insights, or develop innovative solutions to solve problems. Students and educators co-design assignments to explore unique AI applications within the field of study. You should use AI creatively to solve the task, potentially co-design new approaches with your instructor.

Based on Perkins, Furze, Roe & MacVaugh (2024). The AI Assessment Scale