2026-2027 SEFMD Scientific Integrity Policy (Rev B)

BACKGROUND:

In 2026, Science Fairs nationwide noticed an increase in inappropriate use of Artificial Intelligence. Locally the Science and Engineering Fair of Metro Detroit and the Michigan Science Fair had to disqualify five students due to fraud, forgery, inappropriate use of AI, and plagiarism. Two students were banned for life for their inappropriate actions. In addition, two schools were placed on probation with the Science Fair. The following policy has been implemented for the 2026-2027 Science Fair and consists of multiple actions.

SCHOOL AFFILIATIONS:

When a school affiliates with the Science Fair (or a fair affiliates with the Michigan Science Fair), the school must (1) agree to validate all student projects that list a project mentor, qualified scientist, or researcher by contacting the appropriate researcher to determine whether the student actually did the work they claimed to have done. (2) Teachers must review with their students the acceptable and unacceptable use of AI in the research (refer to attached). (3) Teachers must also validate the bibliography section of all high school projects. (4) Teachers must also train and educate students on 'peer reviews' which will be required for high school projects (see below).

PEER REVIEWS:

Peer reviews are a normal part of scientific research and will be required for all high school projects in 2026-2027. After the entry form deadline, HS Students will be assigned 1 or 2 high school student projects for peer review. A student must conduct the peer reviews, using a form (draft attached) for each of the projects, and submit the information not later than 7 days prior to judging. If a student fails to provide meaningful peer reviews, their project will be moved from the normal competition to the exhibition category and not eligible for professional awards or additional competition. Elementary and Middle School students are recommended to use the peer review worksheet on their project.

PROJECT CONCERNS:

If a teacher, student, or judge has a concern regarding the scientific integrity of a particular project, there will be a structured form that must be submitted. Project concerns may be submitted no later than 24 hours after judging results are announced and will be investigated by a separate ethics panel. Project concerns may not be submitted anonymously – full contact information of the reviewer must be provided.

In conclusion, doing a science fair project is a learning experience. The above changes are meant to further educate students as to what is acceptable and what is not. Teachers will have the primary role in this with their students. We are committed to working with all schools and teachers to ensure that the integrity of the Science Fair is maintained going forward.

There will be several workshops in October that deal with this issue and its implementation.

Use of generative AI to support a research project

Task	Could this be acceptable use?	Under what conditions?
Ask generative AI to identify or summarize key points in an article before you read it. Use this as a starting point for your literature review.	Yes	Acceptable without explicit citation
Ask AI to summarize a book or article in your field. Reproduce that summary in your literature review without reading the book or article	No	Never acceptable, as there has been no engagement with the book or source itself.
Use an AI chatbot as a writing tool to help generate and develop ideas.	Yes	Acceptable, may require explicit citation depending on circumstances. Strongly encouraged to keep a log of your prompts as part of your research notebook.
Use generative AI to initially write the research plan, abstract, paper or poster.	No	Never acceptable. This must be independent work of the student. Guidance or refinement after the initial document has been completed can be done with explicit citation and a log.
Use AI to write initial code for your project	Yes	Acceptable, only with explicit citation stating which portions of the code were AI generated and with a log of the prompts.
You write an abstract. Ask AI to sharpen the language but not modify, add to, or replace the main points	Yes	Acceptable use without explicit citation only if changes suggested by AI are limited to grammar and syntax.
Ask generative AI to produce a flowchart, graphic, or image for a paper or presentation	Yes	Image should be clearly marked as AI-generated and with explicit citation as to how the image was created.
Write your research paper. Ask AI to add additional points to your research paper.	No	Never acceptable
Use AI to produce your conclusions, future steps, etc.	No	Never acceptable
Use AI to help identify appropriate statistical tests or software tools. (Interpretation of data must be done by the student researcher)	Yes	Acceptable, requires a log of your prompts as part of your research notebook.
Ask generative AI to produce a starter bibliography	No	Never acceptable
Use AI to collect data and write a research plan. Use AI to provide citations that back up your claims	No	Never acceptable
Ask generative AI to fix the structure or formatting of your bibliography	Yes	Acceptable without explicit citation. You must review and verify all citations as valid

Table from “ISEF International Rules Companion Guide, 2026-2027”, layout modified by SEFMD

Peer Review Worksheet (Rev D)

As part of the 2026-2027 SEMFD, you must do a peer review of one SEFMD randomly assigned project. The peer review will not be seen by judges and will not be seen by the student, but will be reviewed by SEFMD staff. For this year, it is an educational tool for you so that you can reflect on the project you have turned in.

Your peer review must be completed by 11:59 pm on Tuesday, March 9. If you do not do this review, your project will be moved to exhibition

For the project you are assigned, please access their entry, which includes an abstract, a research plan, a presentation and other optional materials. Read carefully and answer these questions.

1. What is the title of the project? _____
2. Is the hypothesis clear? Yes/no
3. Is the research plan clear? Yes/no
4. Is there a conclusion? Yes/no
5. Is there a bibliography? Yes/no
    a. Where you able to verify all items in the bibliography? Yes/no/not all
6. Is there data in the presentation? Yes/no
    a. Did the experimenter take (measure) the data? Yes/no/can't tell
    b. If not, is it clear where the data is from? Yes/no
7. Are there illustrations in the presentation? Yes/no
    a. Did the experimenter create the illustrations? Yes/no/can't tell
    b. How were the illustrations created? Can't tell / It was explained
    c. If not, is it clear where illustrations are from? Yes/No/Can't tell
8. Are there graphs in the presentation? Yes/no
    a. Did the experimenter create the graphs? Yes/no/can't tell
    b. What did they use? Can't tell / it was explained
    c. If not, is it clear where graphs are from? Yes/No/Can't tell
9. Was Machine Learning or Modeling used in this project? Yes/no
    a. Did the experimenter use machine learning or an outside model to analyze data? Yes/no/can't tell
    b. Can you tell if they used an outside program/model with no changes? Yes/no/can't tell
    c. Did they modify or edit an outside program/model's algorithms? Yes/no/can't tell

If you have any comments, please type them below, labelling your comments with the questions they came from. If there are academic integrity issues, please submit a 'Concerns about a Science Fair Project' (located in resources section of web site)

Concerns about a Science Fair Project (Rev E)

Please submit your concern by clicking on the hyperlink on zFairs.sefmd.org (link is at the top). This worksheet has been superseded by the online submission via the web site

Submitted by (must be supplied, can not be anonymous):

Name:
School:
Grade:
eMail:
Cell Phone:

Project of concern information:

Project Title:
Project ID:
Project Category:
Student's Name:
Student's School (if known):

What are your concerns about this project? Check all that apply:

____ Student did not do the work
____ Excessive/inappropriate use of AI
____ Plagiarism
____ Falsified Data
____ Work previously done by others
____ Content
____ Other

Describe in detail your basis of the concern with explicit references. Attach additional sheets as necessary.

How did you become aware of this potential issue?

Supply supplementary information from google docs, YouTube, etc to substantiate your claim and provide the links below.