TIPS FOR PROVIDING STUDENT FEEDBACK

1. CONSIDER YOUR AUDIENCE: STUDENTS, GRADE-LEVEL, LANGUAGE, CULTURE, ETC.

When providing feedback, it is important to consider your audience.

If you are giving feedback to students, first, remember that they are students and not professionals and thus should not be held to the same standard.

Second, remember what grade the student is in and their age. An elementary school student should be given feedback appropriate to their grade and age level and should look different than feedback you would provide to an undergraduate student.

Another thing to consider is what language you are providing feedback in and what language is the first language of the student who is receiving the feedback. If you use complicated jargon with a non-native speaker it may be hard for them to understand what you are saying. Similarly, if the student is a non-native speaker, they may make mistakes in grammar, spelling, and language so your feedback should be sensitive to that and should focus on the content rather than the language. This is especially true when it comes to science projects, where feedback should be focused on the content and scientific quality over the language and spelling.

These projects come from all over the world. Be objective while judging and sensitive to cultural differences. Do not judge cultural elements of the projects and instead focus on research content.
2. BE POSITIVE! PROVIDE CONSTRUCTIVE FEEDBACK

Think about how your feedback can be put to use.

Feedback for students is very helpful and can help them become better scientists. Make sure your feedback provides advice that is specific and relative to their work and is something the student is actually capable of. Give students building blocks to become better scientists and not criticisms that will tear them down.

3. HIGHLIGHT STRENGTHS

Knowing what was done right can be just as helpful.

Do not solely focus on what the project is lacking or what improvements can be made. Identify strengths and achievements of the students. If a student has done a really good job on a specific aspect of their project, let them know!

4. IF YOU NEED SOME IDEAS, HERE ARE SOME AREAS YOU COULD FOCUS ON:

Feedback should be specific to each student. Here are some areas you could focus on.

Project Complexity:
- How complex is the project - simple questions, simple hypotheses, minimal work, amount of data collected? [Note: Simple is fine as long as they do a complete project!]
- Do they demonstrate a deeper understanding of the content/context?
- Is there a connection between motivation/research questions, data gathered, and conclusions drawn?
**Project Structure:**
- Does the project seem structured or exploratory?
- Did work go into planning it? Was there a clear strategy?

**Data:**
- Is the data understood? (i.e. they predict unhealthy conditions but define no parameters of what is healthy), does it connect to the question or their motivation?
- Is the data relevant to the research question? Does it connect (justify) to their conclusions?
- Do they use the right variables in their plots, analyses?
- Is there any statistical analysis or interpretation? Is there any visualization of the data?
- Were limitations addressed? Data quality addressed?
- What other GLOBE data (including from other schools) may have helped with their research?

**Broader Impacts:**
- Do they consider broader impacts? Is it just a simple question and answer project without considering what the data mean in the larger scope? Ecological impacts?
- Do they include personal motivation?
- Do they note a change in personal behavior, stewardship, lifestyle changes, community involvement, action items related to project/data?
- Does the investigation fill a knowledge gap, does it ground truth or support outside projects?
- Does it promote further investigation (and discussed)? Is the hypothesis well-defined? Was it supported or rejected as determined by data?

**Resource Utilization:**
- Did they fully utilize available resources (materials, equipment, STEM professionals/mentors, GLOBE data and vis system, other data sources, data analysis appropriate to grade level, collaborators)?

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