STEM Communication Conference Rubric Criteria

Student Information: Total Marks 30

This rubric will be used to evaluate your presentations at the STEM Communication Conference. It focuses on two key areas: Communication (15 points) and Project (15 points). For more information on how the day is structured, please <u>watch the video</u>.

Project Criteria

Project (Total 15 Points)	1 Point: Unclear	2 Points: Developing	3 Points: Emerging	4 Points: Strong	5 Points: Exceptional
Solution to a real world problem/application or collaboration with industry	The project does not address a clear realworld problem or lack practical application. There is no evidence of collaboration with industry.	The project addresses a somewhat specific real-world problem, but the application may be unclear or limited in scope. Collaboration with industry is not mentioned.	The project addresses a real-world problem, but the application could be further developed. There is no mention of collaboration with industry, but the potential exists.	The project clearly addresses a real-world problem with a well-defined application. There is no evidence of collaboration with industry, but the potential for future collaboration is evident.	The project addresses a significant real-world problem with a clear and impactful application. The team demonstrates successful collaboration with industry or a strong plan for future collaboration.
Design process or scientific method followed is rigorous, viable and accurate	The design process or scientific method is poorly defined, lacking key steps or clear explanations. The chosen approach is not viable or appropriate for the project.	The design process or scientific method is outlined, but there are significant gaps or inconsistencies. The chosen approach may have some flaws that could impact the project's success.	The design process or scientific method is generally well-defined, but there might be minor inconsistencies or areas for improvement. The chosen approach seems viable, but some details may be lacking.	The design process or scientific method is clearly defined and logically applied. The chosen approach is well-suited to the project and demonstrates a good understanding of relevant principles.	The design process or scientific method is exceptionally well-defined, with clear justifications for each step. The chosen approach is innovative and demonstrates a deep understanding of relevant principles. The team demonstrates a strong ability to adapt the process as needed.
Prototype or results are of high quality and reliable	The prototype is not functional AND the results are incomplete, unreliable, or not clearly presented. The data may be flawed or difficult to interpret.	The prototype is not functional, OR the results are incomplete, unreliable, or not clearly presented. The data may be flawed or difficult to interpret.	The prototype has some limitations in functionality or the results have minor inconsistencies. The data may be somewhat limited or not fully explained.	The prototype is generally functional, or the results are mostly reliable and presented clearly. There may be some room for improvement in data quality or explanation.	The prototype is well-functioning and demonstrates a clear understanding of the project goals. The results are reliable, well-presented, and support the conclusions drawn.

Communication Criteria

Communication	1 Point: Unclear	2 Points: Developing	3 Points: Emerging	4 Points: Strong	5 Points: Exceptional
(Total 15 Points)					
Overall team cohesiveness and synergy	Team members appear disconnected, presentations lack flow, and there is little evidence of coordinated effort. Transitions are abrupt, and the audience may struggle to follow the overall message.	Team members make some attempts to connect with each other, but transitions are awkward or unclear. The presentation may feel disjointed, and the audience may miss connections between team members' contributions.	Team members demonstrate a basic level of teamwork. Transitions are smoother, and there is some evidence of shared responsibility for presenting different parts of the project. However, some areas may still feel disconnected.	Team members work together effectively. Transitions are smooth and natural, with a clear flow between team members' presentations. The audience has a strong sense of shared responsibility and collaboration among the team.	Team members work seamlessly together. Transitions are natural and engaging, creating a unified and dynamic presentation. The audience feels captivated by the team's collaborative effort and enjoys the synergy between team members.
Ability to clearly convey ideas, use of language, tone and clarity of concept	Ideas are difficult to understand due to poor organization, unclear language, or inappropriate tone. Jargon or technical terms are not explained for the audience. The overall message is unclear.	Ideas are mostly understandable, but some areas are unclear or poorly explained. Language usage is basic and may lack precision. The tone may not be appropriate for the audience.	Ideas are generally well-presented, with some minor areas for improvement. The team uses clear and concise language with some technical terms explained for the audience. The tone is mostly appropriate, but may falter in some areas.	Ideas are clearly and effectively conveyed. The team uses strong and varied language, engaging the audience. Technical terms are used thoughtfully and explained where necessary. The tone is consistently appropriate and engaging.	Ideas are presented with exceptional clarity and precision. Language is sophisticated and engaging, captivating the audience. The team effectively uses technical terms while maintaining audience understanding. The tone is consistently professional and perfectly suited to the audience and presentation style.
Non-verbal communication - body language, movement and posture	Non-verbal communication is distracting or hinders the message. Excessive movement, poor posture, or facial expressions that don't match the content can confuse or disengage the audience.	Non-verbal communication is somewhat inconsistent. Movement may be awkward or distracting at times. Posture may be weak or unconfident. Facial expressions may not fully support the message.	Non-verbal communication is generally appropriate, but could be improved. Movement is mostly controlled, and posture conveys some confidence. Facial expressions generally support the message.	Non-verbal communication is effective and reinforces the message. Team members use purposeful gestures and movement to engage the audience. Posture is confident and professional. Facial expressions are varied and clearly reflect the content.	Non-verbal communication is dynamic and captivating. Team members use a variety of well-rehearsed gestures and movement to enhance the presentation. Posture is consistently confident and engaging. Facial expressions are natural and perfectly reflect the emotions and content of the presentation.