

Curricular Competency Rubric

	Approaching	Meeting	Mastery
Inquiry and predicting	No evidence of personal engagement. The research question is not focused. No rationale for prediction. Background information is superficial.	Little evidence of personal engagement and initiative. The research question has more than one focus. Limited justification for prediction. Background information is relevant.	Evidence of personal engagement is clear. A fully focused research question clearly demonstrates inquiry skills. Significant independent thinking with a well justified hypothesis. Background information enhances understanding.
Planning and conducting	Methodology of the investigation is appropriate to a limited extent. Limited consideration of sufficiency and reliability of data. Limited awareness of safety, ethical or environmental issues.	The methodology of the investigation is mainly appropriate. Some consideration of reliability and sufficiency of the collected data. Plans show awareness of safety, ethical and environmental issues.	Methodology is fully appropriate. Full consideration of sufficiency and reliability of data, including uncertainty. Plans explain safety, ethical and environmental considerations (global citizenship).
Processing and analyzing data	Insufficient raw data to support a valid conclusion to the research question. Some basic data processing is carried out. Little consideration of the impact of measurement uncertainty.	The report includes relevant but incomplete raw data. Appropriate data processing is carried out. Some consideration of measurement uncertainty	The report includes sufficient relevant quantitative and/or qualitative raw data. Appropriate and sufficient data processing is carried out with accuracy. Full and appropriate consideration of the impact of measurement uncertainty.
Evaluating	Conclusion is not relevant to the research question or is not supported by the data presented. Superficial comparison to the accepted scientific context.	Conclusion is relevant to the research question and supported by the data presented. There is some comparison to the accepted scientific context.	Conclusion is relevant to the research question and is justified with support from the data presented. Conclusion is correctly described and justified through relevant comparison to the accepted scientific context.
Applying, adapting and innovating	Strengths and weaknesses of the investigation are vague. Very few suggestions for the improvement and extension of the investigation. No real world applications mentioned	Strengths and weaknesses of the investigation, such as limitations of the data and sources of error, are described. Some relevant suggestions for the improvement investigation. Real world application is mentioned	Strengths and weaknesses of the investigation are explained and provide evidence of a clear understanding. Student has shown adaptability by providing realistic and relevant suggestions for improvement of the investigation. An extension or real world application is discussed.

Communicating	Presentation is unclear. The understanding of the investigation is obscured by the presence of inappropriate information or missing/incorrect terms. There are many errors in the use of subject-specific terminology and conventions.	The report has limited clarity due to poor structure and/or missing information. The use of subject-specific terminology and conventions is appropriate and correct. Any errors do not significantly hamper understanding.	The presentation of the investigation is clear. Excellent use of subject-specific terminology. Any errors do not hamper understanding.
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