

ENVISION SCHOOLS GRADUATION PORTFOLIO PERFORMANCE ASSESSMENT: *Scientific Literacy (Science & Technology in Society)*

Scoring Criteria	Developing	Proficient	Advanced
<p>ARTICULATING A SCIENCE-RELATED ISSUE/CHALLENGE AND SEARCHING FOR RELEVANT INFORMATION</p> <p><i>What is the evidence that the student can articulate a clear STS issue and explain its context?</i></p>	<ul style="list-style-type: none"> The issue is described in general terms The background science content is fragmented or loosely connected to the described issue The scientific/technological/social significance of the issue is briefly described. 	<ul style="list-style-type: none"> The issue is described in specific terms and in an organized manner The background science content is clear and connected to the described issue The scientific/technological/social significance of the issue is discussed. 	<ul style="list-style-type: none"> The issue is described in a specific, organized, and clear manner The background science content is clear, detailed, and relevant to the described issue The scientific/technological/social significance of the issue is discussed in depth.
<p>CONDUCTING THE RESEARCH</p> <p><i>What is the evidence that the student can gather information from various sources and analyze its credibility?</i></p>	<ul style="list-style-type: none"> Information is gathered from a limited set of sources The credibility and reliability of the information sources are addressed minimally Some of the information cited may be irrelevant to the issue 	<ul style="list-style-type: none"> Information is gathered from a variety¹ of sources The credibility and reliability of some of the information sources are analyzed. Most of the information cited is relevant to the issue 	<ul style="list-style-type: none"> Information is gathered from a variety¹ of sources that represent varied perspectives on the issue The credibility and reliability of the information sources are thoroughly analyzed The information cited is relevant and essential to understand the issue

¹ Sources should vary in genre (e.g., reports of experimental findings, research reviews, informational, advocacy) and type (encyclopedias, Internet sources, science journals, trade journals, books, and primary sources – e.g., data from municipal water boards, text of bills or other publicly available legal records, records of congressional proceedings, resolutions of environmental treaties).

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<p>DEVELOPING AND SUPPORTING A THESIS</p> <p><i>What is the evidence that the student can develop a thesis and support it with evidence?</i></p>	<ul style="list-style-type: none"> • A thesis/argument is presented, but is weakly supported by the collected information • There is limited use of data and/or examples to illustrate the main point of view • Conclusions are overdrawn without a consideration of limitations. 	<ul style="list-style-type: none"> • A thesis/ argument is presented and is supported by the collected information • Some data and/or examples are included to illustrate main arguments or point of view • The validity and limitations of conclusions drawn are evaluated. 	<ul style="list-style-type: none"> • The collected information and evidence are synthesized to create a compelling thesis/argument • Data and/or examples are well selected and provide strong support for main arguments or points of view • The validity and limitations of conclusions drawn are evaluated and other viewpoints on the issue or alternative explanations are considered.
<p>COMMUNICATION</p> <p><i>What is the evidence that the student can clearly communicate ideas to others?</i></p>	<ul style="list-style-type: none"> • The work is presented in a manner that is appropriate to the audience, • Scientific language is sometimes used imprecisely. • The visual representations are somewhat useful to the audience’s understanding of the content: they are labeled but not concisely, and require considerable effort to decipher. • It is not clear how the student’s thinking about the issue was informed by the research. 	<ul style="list-style-type: none"> • The work is presented in a clear manner that is appropriate to the audience • Scientific language is used correctly • The visual representations assist the audience’s understanding of the content: they are neat, well labeled, and easy to understand with some explanation • Reflection on the research project shows evidence of how the student’s thinking about the issue has evolved. 	<ul style="list-style-type: none"> • The work is presented in a clear and convincing manner that is appropriate to the audience • Scientific language is used precisely and appropriately to illuminate ideas • The visual representations greatly enhance the audience’s understanding of the content:: they are neat, well labeled and self-explanatory • Reflection on the research project elaborates on how the student’s thinking about the issue has evolved and strengthens the student’s argument.