

## Scoring Rubric for Full Proposals

### RFP #1: “Improving Equity, Accessibility and Outcomes for STEM Gateway Courses”

Proposal Title: \_\_\_\_\_

Section A: Responsiveness to Full Proposal Questions (Pages 8-10 of RFP, Feb. 8 version)											
<p>Section F of the RFP contained 12 categories of questions for applicants to answer in a maximum of 15 pages total. The space allotted to project teams to answer each question is given in parenthesis at the end of each category. Please evaluate the responses pursuant to the following:</p> <ul style="list-style-type: none"> <li>• <b>For items 1-8</b>, please use the following key to evaluate each response: <b>1=Poor, 2=Fair, 3=Good, 4=Very Good, 5=Excellent</b></li> <li>• <b>For items 9-10</b>, please indicate “<b>Acceptable</b>” or “<b>Not Acceptable</b>” in your evaluation.</li> <li>• Note: Questions 11 and 12 of Section F of the RFP request two additional responses regarding 1) specific issues that the Selection Committee raised with the applicants’ concept proposal; and 2) how the proposal will address accessibility. You do not need to score or evaluate the responses to Question 11 and 12, so no boxes have been provided for scoring or evaluation in this rubric.</li> </ul>											
Category	Optional Brief Comments										
<p>1. <u>How will your proposed project measure or define success?</u>: A strong response will clearly identify the problem of STEM student learning in a particular discipline or disciplines that the project intends to solve, and will include data/metrics to highlight that problem, including identifying any specific equity/achievement gaps.</p> <p>In addition, a strong response will connect the identification of a problem of STEM student learning (and supporting data/metrics) to:</p> <ul style="list-style-type: none"> <li>• A clear description of the learning outcomes to be measured, over what time period, and the validity of those outcome measures;</li> <li>• An explanation of how the proposed project will evaluate students and faculty and what it will measure (this may include changes in retention, proficiency, or competency; in conceptual understanding, self-efficacy and other skills; or in other aspects of pedagogy and learning); and</li> <li>• A description of how the proposed project will improve understanding of learning science and/or assessments, and/or improve effectiveness of pedagogical methods and/or adaptive learning technologies.</li> </ul> <p>(Response length: 1-1 ½ pages)</p>											
<p>Evaluation for Question 1:</p> <table border="0" style="width: 100%; text-align: center;"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td>Poor</td> <td>Fair</td> <td>Good</td> <td>Very Good</td> <td>Excellent</td> </tr> </table>		1	2	3	4	5	Poor	Fair	Good	Very Good	Excellent
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Poor	Fair	Good	Very Good	Excellent							

<p>2. <u>Project plan</u>: A strong response will describe the major components and timeline of the proposed project, including specific aims and research strategy, and will describe in detail the steps to be undertaken and by whom. A strong response will describe a feasible project plan that can be achieved within the proposed timeline. <b>(See Section V., Subsection A. Selection Criteria: Selection Committee additional factors on pages 10-11.)</b> (Response length: 1-1 ½ pages)</p>											
<p>Evaluation for Question 2:</p> <table border="0" style="width: 100%; text-align: center;"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td>Poor</td> <td>Fair</td> <td>Good</td> <td>Very Good</td> <td>Excellent</td> </tr> </table>	1	2	3	4	5	Poor	Fair	Good	Very Good	Excellent	
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<p>3. <u>Data and adaptive learning technologies</u>: A strong response will demonstrate commitment to use robust data and technology tools, including adaptive learning technology.<sup>1</sup> A strong response will describe how the project will use real-time learning outcomes data and adaptive learning technology and other technology tools to improve pedagogy or curriculum. (Response length: 1 page)</p>											
<p>Evaluation for Question 3:</p> <table border="0" style="width: 100%; text-align: center;"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td>Poor</td> <td>Fair</td> <td>Good</td> <td>Very Good</td> <td>Excellent</td> </tr> </table>	1	2	3	4	5	Poor	Fair	Good	Very Good	Excellent	
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<p>4. <u>Learning science</u>: A strong response will concretely describe how the proposed project will use evidence-based pedagogical approaches supported by research from a variety of disciplines (i.e., learning sciences and other relevant disciplines). It will explain what is innovative about the proposed pedagogical approach and/or how it will take an existing successful pedagogical approach and use it to achieve broader scale.</p> <p>In addition, a strong proposal will demonstrate knowledge of and grounding in the literature of the science of learning, and connect the different parts of the project to the research cited. If relevant, a strong proposal will describe how the project furthers the understanding of human learning, with an explicit hypothesis, analytic framework, research design and evidence gathering. (Response length: 1 page, with a 1-page bibliography of key sources in Appendix C)</p>											
<p>Evaluation for Question 4:</p> <table border="0" style="width: 100%; text-align: center;"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td>Poor</td> <td>Fair</td> <td>Good</td> <td>Very Good</td> <td>Excellent</td> </tr> </table>	1	2	3	4	5	Poor	Fair	Good	Very Good	Excellent	
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Poor	Fair	Good	Very Good	Excellent							

<sup>1</sup> For the purposes of this RFP, adaptive learning technology refers broadly to technology to better understand learner experience and to modify learning environments, pedagogical approaches and/or available resources to create a more inclusive learning experience and produce better learning outcomes.

<p>5. <u>Student engagement</u>: A strong response will contain a well-articulated approach to student engagement, potentially including engagement of students who may not think of themselves as being proficient in STEM.</p> <p>Examples of approaches to student engagement may include, but are not limited to:</p> <ul style="list-style-type: none"> <li>• Increasing students’ sense of belonging, and encouraging students’ help-seeking behavior from faculty, teaching assistants, other students, technology resources, etc.;</li> <li>• Engaging with students through active learning, applied learning through a career or workforce pathway lens, and/or highly contextualized learning;</li> <li>• Explaining how, through the proposed approach, students might drive their own learning and/or the learning of their peers;</li> <li>• Explaining how the project will individualize learning or use metacognition; and/or</li> <li>• Identifying how often students will receive meaningful and timely feedback, whether through a technology-mediated environment or face-to-face.</li> </ul> <p><i>Note: A strong response need not include a particular number of approaches to student engagement, but it will display a commitment to student engagement and contain a well-articulated approach for increasing student engagement. (Response length: 1 page)</i></p>											
<p>Evaluation for Question 5:</p> <table border="0" style="width: 100%; text-align: center;"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td>Poor</td> <td>Fair</td> <td>Good</td> <td>Very Good</td> <td>Excellent</td> </tr> </table>	1	2	3	4	5	Poor	Fair	Good	Very Good	Excellent	
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<p>6. <u>Culture</u>: A strong response will explain concretely how the proposed project will impact and/or change traditional “classroom” and disciplinary culture (i.e., educational culture specific to that discipline).</p> <p>Examples may include, but are not limited to:</p> <ul style="list-style-type: none"> <li>• Explaining how the project will address aspects of classroom or disciplinary culture that are barriers to student learning and to students’ sense of belonging;</li> <li>• Encouraging a strengthening-assets or growth-oriented approach to student learning and establishing a classroom context in which all students can succeed; and/or</li> <li>• Identifying ways to take advantage of underrepresented communities’ cultural strengths to increase their achievements in STEM.</li> </ul> <p>(Response length: 1 page)</p>											
<p>Evaluation for Question 6:</p> <table border="0" style="width: 100%; text-align: center;"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td>Poor</td> <td>Fair</td> <td>Good</td> <td>Very Good</td> <td>Excellent</td> </tr> </table>	1	2	3	4	5	Poor	Fair	Good	Very Good	Excellent	
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Poor	Fair	Good	Very Good	Excellent							

<p>7. <u>Scalability and value analysis</u>: A strong response will describe how the proposed project can be scaled, made affordable, or replicated, and/or modified through an open educational resources model. A strong response will also indicate what other dimensions of value can be evaluated in the project and what other data the project team will analyze and with whom it will partner to do that analysis.</p> <p>In addition, a strong proposal will describe the depth and breadth of institutional support for making successful practices normative within the discipline(s), and how faculty will be encouraged or incentivized to adopt successful practices. In evaluating the quality of the response, please consider to what degree the proposal envisions and plans a clear path for broad dissemination and lasting impact. <b>(See Section V., Subsection A. Selection Criteria: Selection Committee additional factors on pages 10-11.)</b> (Response length: 1-1 ½ pages)</p>											
<p>Evaluation for Question 7:</p> <table border="0" style="width: 100%; text-align: center;"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td>Poor</td> <td>Fair</td> <td>Good</td> <td>Very Good</td> <td>Excellent</td> </tr> </table>	1	2	3	4	5	Poor	Fair	Good	Very Good	Excellent	
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<p>8. <u>Project team</u>: A strong response will describe the depth and breadth of expertise of the proposal’s team members, such as particular disciplinary expertise, expertise in learning science, expertise in adaptive learning technologies, and/or expertise in social and behavioral science that can contribute to project design and evaluation. It will describe the nature and strength of any existing collaborations among project team members and explain how the project leaders will use the expertise of all involved to create a well-balanced collaboration. It will also demonstrate meaningful, balanced, near equivalent contributions across the segments represented in the proposal, from design to implementation to evaluation.</p> <p>In evaluating proposals, please consider to what extent team members (including both co-PIs and other identified team members) exhibit diverse expertise and backgrounds that can contribute to the success of the project. Please consider also whether the response indicates how external expertise and/or stakeholder input will be used to iterate over the course of the project. In addition, a strong proposal will demonstrate collaboration with social scientists, behavioral scientists, instructional designers, and/or others with relevant expertise. (Response length: 1-1 ½ pages, with additional detail provided in Appendix A)</p>											
<p>Evaluation for Question 8:</p> <table border="0" style="width: 100%; text-align: center;"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td>Poor</td> <td>Fair</td> <td>Good</td> <td>Very Good</td> <td>Excellent</td> </tr> </table>	1	2	3	4	5	Poor	Fair	Good	Very Good	Excellent	
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<p>9. <u>Budget overview</u>: A strong response will provide a clear summary of how funds will be used and discuss how the project team will maximize existing structures or resources and how, if the proposed innovations place any costs on users, those user costs will be minimized. It should also explain how other resources, such as any outside funds or institutional funds, will be leveraged, if applicable. (Response length: 1 page, with additional detail provided in Appendix B).</p>	
<p>Evaluation for Question 9:</p> <p style="text-align: center;">Acceptable                      Not Acceptable</p>	
<p>10. <u>Common data-sharing/technology platform</u>: A strong response will discuss the potential for using a common data-sharing platform to deliver the course or course series. It will also discuss the potential for sharing data across institutions and include consideration/awareness of ways to protect privacy and personal information.</p> <p>In evaluating this response, please consider the general interoperability of the proposed technological approach with other systems (i.e., is it restricted to a single course-management system or to technology tools that are not widely shared or available?) (Response length: 1 page)</p>	
<p>Evaluation for Question 10:</p> <p style="text-align: center;">Acceptable                      Not Acceptable</p>	



### Section C: Overall Assessment of Impact

The following evaluation should be based on your overall assessment of the application as a whole. Please assess the likelihood that the proposed project will have a powerful, sustainable, positive influence on teaching and learning, and broad and significant impacts in improving learning outcomes and reducing equity/achievement gaps in the discipline or disciplines represented. In evaluating overall impact, please consider the proposal's feasibility, degree of scalability, affordability, replicability, and degree of innovation in concepts, approaches, methodologies or interventions.

Please use the following key to evaluate this overall impact:

**High** (score 5 or 4)

- Application has a high likelihood of powerful, sustainable, positive influence on teaching and learning, and broad and significant impacts in improving learning outcomes and reducing equity/achievement gaps in the discipline or disciplines represented, with no or minor weaknesses in the proposal.

**Medium** (score 3 or 2)

- Application seeks to have a powerful, sustainable, positive influence on teaching and learning, and broad and significant impacts in improving learning outcomes and reducing equity/achievement gaps in the discipline or disciplines represented, with weaknesses in the proposal.
- Application addresses a problem of moderate importance, with some or no weaknesses.

**Low** (score 1)

- Application seeks to address a problem of moderate importance, but weaknesses in the proposal reduce the overall impact to low.
- Application addresses a problem of low or no importance, with some or no weaknesses.

Please also explain your assessment of the proposal's overall impact below.

Please provide up to **500 words** maximum explaining your overall assessment of the proposal's likely impact and highlighting the proposal's strengths and weaknesses, including any constructive suggestions.

Overall Assessment of Impact Score: