

Technical Reviewers' Rating Summary

Proposal Number Application Title Submitted By
 Request For Total Project Costs

Section A. Scoring

Statement	Weighting Factor	G-31-01A	G-31-01B	Average Weighted Score
1. Objectives	9	4	4	36
2. Achievability	4	4	3	12
3. Performance Measurement	5	2	2	10
4. Methodology	8	4	4	32
5. Contribution	8	4	4	32
6. Awareness / Background	5	3	3	15
7. Project Management	3	4	4	12
8. Equipment / Facilities	2	4	3	6
9. Value / Industry - Budget	3	4	4	12
10. Financial Match - Budget	3	4	5	12
Average Weighted Score		185	182	183

Total: 50

250 possible points

OVERALL RECOMMENDATION

FUND X X

FUNDING TO BE CONSIDERED

DO NOT FUND

Section B. Ratings and Comments

- The objectives or goals of the proposed project with respect to clarity and consistency with North Dakota Industrial Commission/Oil and Gas Research Council goals are:

No comment

- Reviewer: G-31-01A

- Rating: 4

This project responds to a well-recognized need to more fully educate North Dakota's youth about the state's energy industry.

- Reviewer: G-31-01B

- Rating: 4

2. With the approach suggested and time and budget available, the objectives are:

No comment

- Reviewer: G-31-01A

- Rating: 4

The timetable shows that curriculum formulation and development will take place between mid-June and November 2013, and will include the participation of approximately 16 teachers. To what extent will this involvement impact their regular duties once school resumes at the end of August?

- Reviewer: G-31-01B

- Rating: 3

The project team held a teachers' focus group in July 2013 that met to guide the project as to best suit a variety of teachers' needs. This feedback will be used to develop the project outline, scope, and objectives for the curriculum writers to incorporate. During this focus group, the project team identified a number of teachers that wish to remain involved in advisory capacity, potentially serving as a tester for pilot modules, in addition to championing the project among their peers.

- Applicant

3. A method for a measurement of success has been clearly defined:

No comment

- Reviewer: G-31-01A

- Rating: 2

Web hits and adoption of the curriculum alone may not be a reliable measure of the success of the program. Other factors (student/teacher feedback, increasing numbers of students expressing an interest in STEM subjects, higher levels of enrollment in higher education energy-related programs, for example) should perhaps be considered.

- Reviewer: G-31-01B

- Rating: 2

The nature of this project provides for difficulties in specific, measureable goals since the program is a long-term program starting in the 4th grade. Measuring that differential is influenced by many factors, so it is hard to attribute specific success to this effort. Previous efforts have been geared toward high school level, and the EmPower Commission feel that it's important to raise the level of interest at a younger age, encourage their involvement in STEM curriculum as they go through their school careers, and be open to a high-wage, stable energy career as they graduate. The industry sees this overall effort as complementary to other work that is being done by education and industry.

- Applicant

4. The quality of the methodology displayed in the proposal is:

No comment

- Reviewer: G-31-01A

- Rating: 4

The methodology is logical and straightforward.

- Reviewer: G-31-01B

- Rating: 4

5. The educational scientific and/or technical and/or economic contribution of the proposed work to specifically address North Dakota Industrial Commission/Oil and Gas Research Council goals will likely be:

No comment

- Reviewer: G-31-01A

- Rating: 4

This program will enhance students' awareness of North Dakota's energy industry and the career opportunities it has to offer.

- Reviewer: G-31-01B

- Rating: 4

6. The background of the principal investigator, and the awareness of current educational activity, and involvement of industry partners of the published literature as evidenced by referenced literature related to the proposal is:

No comment

- Reviewer: G-31-01A

- Rating: 3

The list of websites related to energy education is rather short. The project team is presumably aware of many more.

- Reviewer: G-31-01B

- Rating: 3

7. The project management plan, including a well-defined milestone chart, schedule, financial plan, and plan for communications among the investigators and subcontractors, if any, is:

No comment

- Reviewer: G-31-01A

- Rating: 4

Investigators' responsibilities are well-defined and regular communications between project management and sponsors will be scheduled.

- Reviewer: G-31-01B

- Rating: 4

8. The proposed materials and media to be developed or used are:

No comment

- Reviewer: G-31-01A

- Rating: 4

A variety of delivery platforms will be considered as part of the curriculum development phase of the project

- Reviewer: G-31-01B

- Rating: 3

9. The proposed budget “value”¹ relative to the outlined work and the financial commitment from other sources is of:

No comment

- Reviewer: G-31-01A

- Rating: 4

The \$400 per day allowance for teachers (under the curriculum/content category in the budget table) seems very high. Excluding meals, lodging, and transportation at state rates, what else does this amount cover?

- Reviewer: G-31-01B

- Rating: 4

The project team received information from Bismarck Public Schools on typical costs for curriculum development and delivery platforms which drove the estimations included in the budget portion of the project. Teacher involvement required over the course of the project is still being evaluated as to where it would be most beneficial. Because the project team expects to get feedback from teachers representing a variety of school sizes, age groups and geographic locations, the project team felt it would be prudent to estimate that transportation for teachers could be significant in order to receive true representation of the geographical influences on the energy industry perception to adequately tailor the curriculum.

- Applicant

10. The “financial commitment”² from other sources in terms of “match funding” have been identified:

No comment

- Reviewer: G-31-01A

- Rating: 4

This project is very well supported by its stakeholders.

- Reviewer: G-31-01B

- Rating: 5

1 “value” – The value of the projected work and technical outcome for the budgeted amount of the project, based on your estimate of what the work might cost in research settings with which you are familiar. A commitment of support from industry partners equates to a higher value.

2 “financial commitment” from other sources – A minimum of 50% of the total project must come from other

sources to meet the program guidelines. Support less than 50% from Industrial Commission sources should be evaluated as favorable to the application; industry partnerships equates to increased favorability.

General Comments

I think educating teachers and students is critical to ND's energy future, not only from a workforce perspective, but from a social acceptance perspective as well. I would have liked to see some additional detail on why 4th and 8th grades were chosen and whether or not those are the optimum target ages for the curriculum. Targeting physical and earth science curriculums classes may also be a good fit.

- Reviewer: G-31-01A

This project is worthy of serious consideration. However, I would like to see more detail in some aspects of the proposal, particularly the measurements of success, which need to be expanded; and the budget outline.

- Reviewer: G-31-01B