

## **Diversity Innovation Working Group (D-IWG) Report**

Determining the Drivers of STEM Educational Success in New Mexico: Creation of the First Long Term Educational Research (LTedR) Site.

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NM LTedR: Determining the Drivers of STEM Educational Success in New Mexico. April 11-13, 2014. Best Western Convention Center. 1100 N. California Street, Socorro, NM 87801. 575-838-0556.

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## SUMMARY

Describe objectives of D-IWG

Gather a Diversity Innovation Working Group in order to begin development of a Long Term *Educational* Research (LTeDR) site here in New Mexico. The specific goal of the working group meeting was to lay the groundwork for an NSF Improving Undergraduate STEM Education (IUSE) proposal to document what is currently occurring in the STEM educational landscape at different NM institutions and what has the most positive effect on several measures of student learning and important educational outcomes.

Summarize key ideas discussed/knowledge generated

During Friday's night sessions we organized a framework of possible dependent and independent variables that would function within the current conceptual model. This model could be used as a state-wide data network to serve as a clearinghouse of information and data for all institutions around the state to address important educational outcomes particular to the educational ecosystem. On Saturday, we crafted a general structural framework for the LTeDR that would allow the group to flesh out a NSF-IUSE proposal to be submitted during the fall of 2014. This required extensive discussions that drew upon the varied expertise of the participants to develop reasonable metrics to assess a diversity of student learning at each institution.

Describe plans for sharing what is learned with communities of interest

Participants will return to their institutions to meet with key administrators and colleagues in order to:

- Discuss ideas and possible collaborations
- Determine the feasibility of the project and what data can be collected
- Gather information about lessons learned from other similar program models
- Develop core communities of practice that will commit to contributing data and ideas.

We will use Dropbox as a virtual sharing tool.

## **OUTCOMES**

The group had initial proposal discussions and developed a plan of action. Among the specific tasks, we identified key administrators and collaborators that will be contacted. Each participant will contact their specific colleagues at their institution in order to determine feasibility of metrics planned for our data collection and analyses. The following provisional list of institutions were tasked with the following:

New Mexico Highlands- Mary Shaw: Will contact Carol Linder, Sara Brown, David Sammeth (Chair of Biology and Chemistry) and Sarah Corey-Rivas (possible collaborators), Terisita Aguilar (Provost), and Jean Hill (at the Institutional Research Office).

San Juan College-Veronica Evans: Will contact Eric Miller, Jen Lewis, Don Hyder and Ron Jerrigan (the latter is at the Institutional Research Office). Additionally, she will meet with Barbara Ake (Vice President of Learning).

New Mexico State-Michele Shuster, Bill Boecklen, and Avis James: Will contact Jeff Arterburn, Ralph Preszler (Chair of Biology), Judy Bosland (Institutional Research Office), and Provost Daniel Howard.

University of New Mexico-Marcy Osgood, Sushilla Knottenbelt, Martina Rosenberg, and Satya Witt- Tim Schroeder (STEM gateway director), Steve Cabaniss (Chair of Chemistry), Diane Marshall (Associate Dean for Curriculum and Instruction), Alisha Ray and Rob Miller (Chair of Biology). Marcy Osgood will contact a few colleagues at Central New Mexico Community College to see if they would be interested in collaborating in the project.

New Mexico Tech- Snezna Rogeli will contact Michaelann Tartis.

Western New Mexico University-Jose Herrera will contact Jeff Hill (Chair of Natural Sciences) and Paul Landrum (Director of Institutional Research Office).

Timeline: The group agreed to report back on available data and willing collaborators by 28<sup>th</sup> of April, 2014. We have established a Dropbox account for participants to share information. We will collectively review this information to assess the feasibility of preparing a proposal for the next IUSE program solicitation. Future tasks and deadlines will then be determined.

## PARTICIPANTS

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<b>NAME &amp; AFFILIATION</b>	<b>ROLE</b>	<b>Email</b>
Mary Shaw [NM Highlands]	Faculty	<a href="mailto:shaw_mary@nmhu.edu">shaw_mary@nmhu.edu</a>
Veronica Evans [San Juan College]	Faculty	<a href="mailto:evansv@sanjuancollege.edu">evansv@sanjuancollege.edu</a>
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Satya Witt [UNM]	Faculty	<a href="mailto:smwitt@unm.edu">smwitt@unm.edu</a>

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## APPENDIX

### Photos



Sunday morning: Discussing the timeline



Saturday afternoon: Working on possible institutional data



Saturday morning: Brainstorming possible metrics

## FINAL AGENDA

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### Friday April 11th, 2014

6:00 pm            Opening Reception, Dinner, Introductions, Overview & Discussion

### Saturday April 12th, 2014

7:30-8:30am      Breakfast

8:30-9:45am      Crafting the Vision of the LTeDR program in NM

9:45-10:45am    Group session (feedback on vision; how to move forward)

10:45-12:00pm   Breakout Sessions (identify opportunities and challenges)

12:00-1:00pm    Working Lunch (identifying common metrics that are meaningful and generalizable)

1:00-3:15pm      Breakout Sessions (address a specific challenge identified during morning breakout session)

3:15-3:30pm      Break (*coffee, juice, & pastries*)

3:30-5:15pm      Reporting and Sharing (taking the pulse)

5:15pm            Working Dinner (institution-specific plans and outline of the LTeDR idea)

### Sunday April 13th, 2014

7:30-8:30am      Breakfast

8:30-9:45am      How will we develop a framework for the proposal?

9:45-12:00p.m    Developing timeline and assignments for work at home

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