Montana Office of the Commissioner of Higher Education

Improving Teacher Quality State Grants
Title II, Part A
No Child Left Behind Act of 2001 (NCLB Act)

Grant Period: January 1, 2015 – December 31, 2015

Office of the Commissioner of Higher Education
2500 Broadway, Helena, MT 59620-3201
Phone: (406) 444-6570
Fax: (406) 444-1469
Creating a Culture of Data Literacy: Providing Support for Eastern Montana's Rural Teachers

Montana State University

Tena M. Versland, EdD
Sarah Schmitt-Wilson, PhD
Jennifer Green, PhD
FORM 1: COVER PAGE

1. Project title (maximum eight words): Creating Data Literacy In Eastern Montana Rural Schools

2. Institution of higher ed. (or nonprofit organization):
   
   Academic department: Montana State University - Department of Education
   Address: PO Box 172880
   City: Bozeman
   State: MT
   Zip: 59717-2880

3. Project Director(s): (please list principal project director first)

<table>
<thead>
<tr>
<th>Name</th>
<th>Telephone (work)</th>
<th>E-mail</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Tena M. Versland</td>
<td>406-994-6799</td>
<td><a href="mailto:tena.versland@montana.edu">tena.versland@montana.edu</a></td>
</tr>
<tr>
<td>2. Sarah Schmitt-Wilson</td>
<td>406-994-3120</td>
<td><a href="mailto:sarahschmittwilson@gmail.com">sarahschmittwilson@gmail.com</a></td>
</tr>
<tr>
<td>3. Jennifer Green</td>
<td>406-994-5332</td>
<td><a href="mailto:jgreen@montana.edu">jgreen@montana.edu</a></td>
</tr>
</tbody>
</table>

4. Mailing address of principal project director (if different from above): same

5. Core content area(s): math, science, ELA, arts, social sciences
   Grade level(s): 5-8, 9-12
   Other: K-4

   Number of participants: 75-80

6. Does this proposal constitute a continuation or expansion of a previously funded project? ☑Yes ☐No

   If yes, please give the year of the original grant(s): 2013-2014

7. List names of all collaborating school districts:
   Savage, MT  Culbertson, MT  Bainville, MT

8. Proposed funding:

<p>| | |</p>
<table>
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<td>C. Collaborating school districts</td>
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9. Fiscal or grant administrator responsible for grant:

   Name: Carmen Fike
   Title: Office of Sponsored Programs, Education Grant Specialist
   Telephone: 994-1939
   E-mail: cfike@montana.edu

   ☒ Project Director
   ☒ Chief Academic Officer
FORM 2: PARTNERSHIP ELIGIBILITY

Project Title:
Creating Data Literacy in Eastern Montana Rural Schools

Project Director:
Tena M. Versland

Required Members (please list as indicated):

1. A private or state institution of higher education (IHE) and the division of the institution that prepares teachers and principals
   Montana State University - Department of Education

2. A school of arts and sciences
   Montana State University - Department of Mathematical Sciences

3. A high-need Local Education Agency (LEA)
   Savage Public Schools, Savage, MT

Additional Members (if applicable):
(This list may include another LEA, a public charter school, an elementary school or secondary school, an educational service agency, a nonprofit educational organization, another IHE, etc.).

Partner:
Culbertson Public Schools, Culbertson, MT

Partner:
Bainville Public Schools, Bainville, MT

Partner:
N/A

Partner:
N/A

Partner:
N/A
INSTITUTION OF HIGHER ED. / NONPROFIT ORGANIZATION: Montana State University

PROJECT DIRECTOR(S): Tena Versland

PROJECT TITLE: Creating Data Literacy in Eastern Montana Rural Schools

PRIORITY AREA(S): (Check applicable boxes)
- [ ] Substantive participation and “vertical teaming” of teachers and administrators and higher education faculty
- [ ] Collaboration/partnerships involving one or more IHE's
- [ ] Multi-year projects focused on long-term, sustainable, and widely-disseminated models
- [ ] Development and/or demonstrated models of success through partnerships with high-need schools
- [ ] Improving % of highly qualified teachers

GRADE LEVEL(S): [ ] 6-8 [ ] 9-12

PROJECT FORMAT: (Check applicable boxes)
- [ ] Summer workshop(s) with follow-up activities
- [ ] Workshops or other activities during school year
- [ ] Other (specify): 2 Credit Graduate Class EDCI 588-853 Data Literacy for Teachers

PROJECT SERVICE REGION(S): Eastern Montana (Savage, Culbertson & Bainville)

INSTRUCTIONAL TIME FRAME (actual dates of instruction): From August 2015 To December 2015

NUMBER OF CREDIT HOURS PER PARTICIPANT: Graduate 2 Undergraduate CEU None

NUMBER OF CONTACT HOURS PER PARTICIPANT: 90

ABSTRACT: In a paragraph of approximately 100 words, please summarize the project's goals, objectives, activities, target population(s) and expected number of participants.

This project will train 75 Eastern Montana rural middle and high school teachers in data literacy skills to improve instruction and increase student achievement. Savage, Culbertson and Bainville schools will host joint PIR and Early Release days in August-November facilitated by MSU education faculty. Data literacy trainings will focus on developing strategies for understanding, analyzing and using data to improve instruction. Topics will include software programs for data analysis, discussion of new SBAC test results, instruction in basic statistics. MSU faculty will also teach EDCI 588 - Data Literacy for Teachers for these rural school teachers following early release day trainings.
1. Have any of the project directors for this proposal had previous grants through the Montana Office of the Commissioner of Higher Education?

☐ Yes
☐ No

If yes, please give the following information:

- The name of the project director/s and the year of the grant/s:
  
  Tena Versland 2014 Creating a Culture of Data Literacy for Improving Instruction

- For each grant, the amount of the original award and the total amount expended:
  
  $99,023.00 was awarded - $74,000 expended to date with additional expenditures coming.

- For each grant, the number of participants projected and the number who participated:
  
  40 projected - over 100 served

If yes, provide a brief description of the results of the evaluation of each grant. Evidence of improvement in classroom instruction or student achievement would be most significant.

Teacher evaluations indicate that teachers gained skills in how to organize and analyze data to make instructional decisions. Seventy teachers from schools on the Crow and Northern Cheyenne reservation are currently using the results of this training to organize and analyze MAP scores (Measures of Academic Progress) longitudinally to determine areas of need at each grade level in math, reading, and science. In pre-post test surveys from spring and summer training sessions, teachers indicated that the data literacy training opportunity had reduced their anxiety about data analysis and had given them new skills and confidence in evaluating the quality of assessments and data for instructional meaning.

2. For each project director, please list any other grants or other significant obligations (summer school teaching, consultancies, book contracts, etc.) during the period of proposed grant activity. Please describe how the project director's time will be allocated between the Title II-A project and these other obligations.

  Tena Versland - teaches two sections of Education Leadership classes, typically "K-12 Instructional Leadership" in the middle of June. She has no other teaching obligations after July 1, 2015. As of this writing, Dr. Versland has already begin to collaborate and advise school leaders in Savage, Culbertson and Bainville. Title IIA project time will begin in May with work on a needs assessment and subsequent development and procurement of training materials and books. Because her fall classes are taught online, Dr. Versland has time to travel to Eastern Montana and deliver coursework for the EDCI 588 class and facilitate the PIR and early release days.
3. If the applicant is an institution of higher education, does it have a school or department of education?

☐ Yes
☐ No

If yes, describe the joint efforts that were involved in preparing this proposal and planning project activities between the school or department of education and a core academic area department at the institution. (Please identify participants by name and title at the institution.)

Jenny Green, a professor of Statistics in Mathematical Sciences, was a Co-PI on our previous Data Literacy Grant and is once again partnering with Tena Versland and Sarah Schmitt Wilson of the Education Department to develop this proposal. Jenny will also collaborate in developing a needs assessment and use the results to design curriculum and materials for the fall class and PIR and Early Release Days trainings. At the completion of the trainings and Data Lit class next fall, Jenny, Sarah and Tena will analyze the data and interviews to determine the success of the program and decide how we should move it forward to other rural schools. It is also our intent to make research presentations about this program and its benefits. Sarah and Tena just returned from the National Rural Education Association conference and offered a workshop about how to develop partnerships for professional development and data literacy.

4. Does the applicant institution of higher education or nonprofit organization have a pre-existing agreement with one or more local school districts for providing professional development for teachers or teams of teachers (and appropriate school personnel) of that district?

☐ Yes
☒ No

If yes, in the space below give the name of each such local school district and provide documentation of the agreement/s (with signatures) in Appendix B of the proposal. If no, in the space below give the name of one or more local school districts that have provided a letter of agreement indicating official support of proposed project activities and provide the letter/s (with signatures) in Appendix B of the proposal.

Savage Public Schools - Superintendent Lynne Peterson has submitted her letter of support which is attached.

5. Describe the participation of teachers and/or administrators of the local school district(s) named in question four in preparing this proposal and planning proposed project activities. LEAs must consult
with private school officials during the design, development, and implementation of the professional development program to ensure equitable participation. Title IX, Section 9501 of ESEA requires that Title II, Part A services for professional development that are provided to private school teachers and other educational personnel be equitable in comparison to those provided to public school teachers. (Please identify participants by name and title within the school system.)

Lynne Peterson, Superintendent of Savage Public Schools and Renee Rasmussen, Superintendent of Bainville Public School have participated in development of this proposal by providing ideas for the scope of training sessions and by rearranging their district PIR days to enable all districts to meet together for training and school team development. Local Superintendents agreed to notify private schools (home schools) about this grant and offer to participate. As of this application, no private school has replied and offered input about the proposal. Professional development will be advertised again to these schools before the actual training sessions begin in August of 2015. We will continue to encourage their participation.

6. Describe any other involvements with K-12 schools any project director has had in the last five years (e.g., supervising student teachers, teaching on-site courses, judging nominations, etc.).

Three years prior, Tena Versland, PI was a principal in the Livingston School System and organized and led district level and school level professional development in brain research, techniques for differentiation of instruction and infusing technology into the classroom. Dr. Versland also led school elementary focused Step Up to Writing training for approximately 65 teachers K-8. Over the last year, Tena Versland has led professional development training sessions for approximately 70 teachers from Crow and Northern Cheyenne reservation schools in data literacy; that training is scheduled to be complete at the end of November 2014.
PROPOSAL PROJECTIONS AND PROGRAM REPORT: TEACHERS

Please complete first column in proposal; then complete other columns in year-end report.

<table>
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<th>Number Projected in Proposal</th>
<th>Actual Number of Participants</th>
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<td>Average Number of Participants Per Event</td>
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Creating a Culture of Data Literacy: Providing Support for Eastern Montana’s Rural Teachers

A) Statement of Need

Our purpose is to establish a culture of data literacy within rural, underserved districts by training teachers in data collection and analysis strategies, and creating and implementing a sustainable system of data use in these Eastern Montana schools. The Eastern Montana schools selected for participation in this grant (Savage, Culbertson Bainville and Frazer) are considered high poverty schools (>20%) which are underserved in terms of proximity to a university or school of education for the purpose of providing (or offering) professional development or graduate level courses which advance teacher skills and knowledge. The Montana State University (MSU) Department of Education has established partnerships with schools in the area near to the MSU campus. However, as the state’s Land Grant University, it is the responsibility of MSU to serve all schools and communities in the state. School superintendents in Eastern Montana are facing many challenges due to the changing social and economic landscape influenced by the oil and gas boom of the Bakken area in Eastern Montana and Western North Dakota. Superintendents report that recruiting high quality teachers has been difficult due to the housing shortage and teaching salaries that are not competitive with salaries that young people can earn in the oil boom areas. Additionally, increases in enrollment and more diverse student populations with higher needs place an additional strain on district budgets and negatively impact schools’ abilities to hire consultants and experts to deliver professional development to teachers. By developing this data literacy proposal with rural Eastern Montana schools, the MSU education faculty can begin to develop a model that addresses the needs of rural and underserved schools regarding data in the state. The approach to professional development among teachers and schools in Eastern Montana holds promise not only for training educators in data analysis but also in other areas such as teacher leadership, instructional capacity building and the implementation of common core state standards.

Data literacy allows educators to efficiently evaluate teaching and learning processes so that necessary instructional changes boosting student performance occur more quickly. Because Montana is one of the 44 states that has adopted the Common Core State Standards (CCSS) and is implementing the new Smarter Balanced
Assessment system in 2014-15, districts will be required to analyze student data to determine students’ proficiency levels in math and ELA aligned with the CCSS. Hence, the need for greater data literacy is upon us.

Although all schools are currently required to collect student performance data in the pursuit of increasing student achievement across all demographics, most school districts do not have a clear vision for how these data will be used to inform and improve instruction (Creighton, 2006). Moreover, few school leaders or teachers have been trained in data literacy strategies or possess the knowledge and skills necessary to accurately and effectively analyze data and then use those results for program improvement; often, teacher education programs do not require a data analysis course for graduation. Even if university graduate courses in data literacy were made available, few teachers in remote rural schools would have the opportunity to benefit from that training. The rural schools included in this grant (Savage, Culbertson, Bainville and Frazer) are at least 250 miles from the nearest state university which makes it difficult for teachers to travel to take graduate level classes. Also, internet capability and bandwidth issues make online learning less than ideal in many, rural towns and schools in Eastern Montana.

This grant proposal targets rural schools in Eastern Montana for training school-wide data teams so that all teachers can share in some aspect of data analysis and decision making about instructional practices and school programs. Kekahio and Baker (2013) claim that by building data teams in a school organization, the teams can “monitor student and school performance and efforts to improve performance within the organization.” Advancing data literacy among Montana’s teachers and administrators is valuable as schools implement the Common Core State Standards (CCSS) and test student performance against those standards using the new Smarter Balanced Assessment. Deepening educators’ understanding of the benefits of analyzing data and using the results to improve instructional practices creates the necessary momentum to successfully implement CCSS as an agent to increase students’ academic achievement. This proposal will serve as high quality professional development that empowers Eastern Montana rural school teams to establish, support and sustain a data-driven culture within their schools and districts. It will also provide Eastern Montana rural teachers and leaders with data literacy skills and experiences needed to use data to effectively evaluate teaching and learning processes and make necessary instructional changes to boost student performance. In addition to providing a valuable service to rural schools in Eastern Montana, which
are typically underserved with respect to professional development opportunities, we believe this proposal has the potential to be developed for all rural and underserved schools in Montana.

**B) Goals**

Specifically, our goals are:

- **To provide rural teachers in Eastern Montana with training in data literacy strategies including data collection and analysis as well as use of technology and software programs to organize and use student and program data in order to improve instruction and increase student achievement commensurate with the goals of Common Core State Standards work.**

- **To establish partnerships between rural, high need and underserved school districts and Montana State University to design sustainable approaches to professional development for on-going learning opportunities for teachers.**

- **To develop a sustainable network of rural teachers experts who can support and assist colleagues with data analysis and instructional improvement.**

**Rationale**

While there have been numerous professional development opportunities, which discuss the need for collecting, and analyzing data, few, if any, professional development opportunities have been able to demonstrate how to analyze data and interpret the results to improve classroom practice (U.S. Department of ED, 2011). Few trainers possess the skills and knowledge in statistics and data interpretation to understand how to apply statistics in a meaningful way so that practitioners can see the value in, and gain the skills for data analysis. We believe because of our experiences as former classroom teachers and school administrators, now teaching data analysis at the college level, we have an in-depth understanding of how to create and sustain a system of data literacy that is both theoretical and practical so that data analysis leads to targeted instruction to enhance teaching and learning.

Understanding that “one and done” training is inefficient and ineffective, the goal of this program proposal is to design a sustainable system of training that begins during the beginning of the year PIR (pupil instruction related) days and continues during three more early release days in the Fall of 2015. Because rural schools and
teachers in Eastern Montana are more than 250 miles from the nearest state university, they have been underserved with respect to professional development opportunities offered by universities and schools of education. It is our goal to bring training and education opportunities to these underserved areas through high quality face-to-face instruction and professional development that is aligned with district needs and reinforces effective instruction and decision making toward the implementation of common core state standards.

As we combine the training of multiple rural school districts and teachers into single site venues, we will be creating opportunities for teachers from neighboring schools to join together, share their knowledge and teaching strategies and learn more about data analysis and instructional decision making. It is our hope that as “data literacy training” advances, sustainable relationships can be built among teachers from area rural schools. These relationships then will create a network of educators who are able to share ideas about teaching and learning practices, and provide help and support to one another in analyzing data and making instructional and programmatic decisions to promote Common Core State Standards implementation and to increase student achievement in rural Eastern Montana schools.

C) Description of Project Activities

- **In late spring /early summer of 2015, MSU faculty will work with rural school superintendents to develop a needs assessment and survey given to all teachers in the Savage, Culbertson, Bainville and Frazer schools to identify their strengths and challenges in the areas of data use and instructional decision-making. Once the results of the needs assessment are available, MSU faculty will plan with district leadership to design curriculum and training sessions and procure materials to be used in PIR day and Early Release sessions in the fall of 2015.**

- **Beginning in August of 2015, approximately 105 teachers and administrators in the Savage, Culbertson, Bainville and Frazer school districts will participate in a joint PIR day training session about current data use and the development of a sustained and purposeful approach to data driven decision-making across middle school and high school grades and subject areas associated with Common Core State Standards. The first PIR day session will also include topics determined by the needs assessment completed earlier in**
the summer. MSU faculty will facilitate the PIR day. Eighty teachers and leaders will participate in this joint PIR day professional development session.

- MSU faculty will return to Eastern Montana on three more dates to facilitate data analysis training sessions offered during Early Release days, scheduled jointly for all four districts and all teachers (105). The topics of these sessions will include analyzing the results of SBAC testing of Common Core State Standards performance and the use of data collection and management software such as SurveyMonkey and EXCEL. These Early Release sessions are spaced throughout the fall to enable teachers to practice their newly acquired data literacy skills in analyzing and using their classroom data to improve student performance.

- From participation in the PIR day and Early Release training sessions, all teachers in the Savage, Culbertson and Bainville schools will be invited to enroll in EDCI 588 Data Literacy for Teachers, a 2 credit course offered by MSU faculty through MSU’s Extended University. Tuition for the course will be paid by the grant and will also be advertised and offered to non-public school teachers in the area. This blended course will extend learning by introducing more advanced data analysis strategies and will include instruction in basic statistics and the use of EXCEL as a data management and analysis tool. It will be taught face-to-face in the late afternoons following the PIR and Early Release days training sessions. The rest of the course will continue online with assignments and discussions occurring between face-to-face meetings. It is expected that nearly all (about 75 teachers) from the three districts will enroll in the MSU EDCI 588 course.

- Teachers will be asked to complete a post-course/training survey to measure their data analysis skills and commitment to using data to improve their teaching. Some teachers may be asked to complete interviews that will help us more deeply understand the impact of this training and how we may be able to use this professional development approach to offer data literacy and other kinds of training to rural schools in other underserved areas across Montana.
Earlier this year, the Principal Investor and a Co-PI presented our current Data Literacy Grant results at the National Rural Education Association meeting in San Antonio. We anticipate also sharing the results of this current proposal and the evaluations of the PIR/Early Release days with other practitioners, educators and researchers via publications and presentations. This gives other universities and schools of education, as well as state regulatory agencies, the opportunity to learn about our innovative program and adopt this specific approach to provide similar services for other rural and underserved school districts.

D) Evaluation Plan

- Measurable outcomes
  - This proposal targets approximately 105 teachers and administrators from four rural school districts in Eastern Montana. These 105 people will attend PIR and Early Release Day training sessions as data team members for their respective districts. Herein, these 105 teachers and administrators will be referred to as members of data teams.
  - All members of the data teams will learn how to better understand and use statistics to analyze classroom and district data in a collaborative setting mentored by MSU personnel, and in a blended graduate course also monitored by MSU faculty.
  - All members of the data teams will collaboratively develop collective expertise in data literacy so that they will work together to continue to practice new skills and eventually train other educators in neighboring districts in data literacy strategies.
  - All members of the data teams will sustain knowledge by participating in The EDCI 588-853 Data Literacy for Teachers graduate class from MSU’s Extended University. This course is a blended course featuring both face-to-face instruction as well as online instruction and discussion. The online portion of the class will be designed for participants to log on and participate in discussions that ask questions about their data knowledge and skills. Teacher participants will be encouraged to post examples of how they used the data literacy training to help them make instructional or programmatic
decisions; thus, providing participants with community of learners and network of support once they finish formal training and coursework.

- Teachers and administrators will also be trained in how to use SurveyMonkey and EXCEL for data collection and analysis. Teachers at the middle and high school levels will be encouraged to demonstrate EXCEL use to students in math and sciences in order to promote technology that can help assist students with their reasoning, problem solving, data interpretation and classification knowledge and skills.

- All members of the data teams will complete a pre and post survey regarding data literacy and participate in a focus group to provide descriptive qualitative feedback on perceptions of self-efficacy of data use.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Assessment</th>
<th>Timeline</th>
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<tbody>
<tr>
<td>All members of the data teams will learn how to better understand and use statistics to analyze classroom and district data in a collaborative setting mentored by MSU personnel.</td>
<td>Pre/Post Survey and measure of self-efficacy</td>
<td>PIR and Early Release Days (Fall 2015) and EDCI 588 (Fall 2015)</td>
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<tr>
<td>All members of the data teams will collaboratively develop collective expertise in data literacy so that they would work together to continue to practice new skills and eventually train other educators in data literacy strategies</td>
<td>Pre/Post Survey and measure of self-efficacy</td>
<td>PIR and Early Release Days (Fall 2015) and EDCI 588 (Fall 2015)</td>
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<td>All members of the data teams will sustain knowledge by</td>
<td>Descriptive statistics of</td>
<td>Data Literacy</td>
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participating in EDCI 588-853 Data Literacy for Teachers course through MSU’s Extended University. This course is designed for participants to learn more about basic statistics and learn to apply them to their classroom data. Students will ask questions and post examples of how they used the data literacy training and knowledge of basic statistics to help them make instructional or programmatic decisions; thus, providing participants with community of learners and network of support once they complete the course.

All members of the data teams will establish personal relationships with MSU faculty toward developing more opportunities for professional development training on other topics.

D2L discussions and class reflections to evaluate their knowledge and comfort in applying DDDM and statistics to their data analysis.

Interview questions, PIR and Early Release Days Fall 2015

E) Role of Key Personnel

PI, Tena Versland, is acting as the liaison between Montana State University and the participating school districts. She has been in discussions with the superintendents of Savage, Bainville, Culbertson and Frazer in the planning of this proposal. In late spring or early summer, Dr. Versland will meet again with these superintendents to arrange PIR and Early Release Day schedules and design a needs assessment that will be given to all teachers in these three schools. The results of the needs assessment survey will determine the goals and activities for the PIR day and Early Release day training sessions. Dr. Versland will travel to Eastern Montana to facilitate PIR Day training and Early Release days trainings. She will also co-teach the EDCI 588 course portion that is delivered face to face in Eastern Montana. Following the completion of the training sessions and EDCI 588 course, Dr. Versland
will work with co-PI’s to evaluate the success of the program. She will be responsible for submitting all quarterly budget and status reports to OCHE, will arrange enrollment of students for the EDCI 588 course and all tuition payments through Extended University.

Co-PIs, Sarah Schmitt-Wilson and Jennifer Green will meet with the four superintendents of participating schools and participate in the discussions to develop a needs assessment, will create the needs assessment survey and will disseminate the assessment to all teachers in the Savage, Culbertson, Bainville and Frazer schools. Dr. Wilson and Dr. Green will then use the results of the needs assessment to design curriculum training materials and create resources for training sessions. They will also procure materials for the EDCI 588 course and will create the course in D2L along with assignments for students between the face to face meetings. Following the completion of the data literacy training sessions, the Co-PI’s will send a post-training assessment to evaluate the success of the program. Dr. Wilson and Green will also collaborate in analyzing the data from the assessment and making recommendations for program evaluation and next steps. Schmitt-Wilson and Green will also prepare reports for the granting agency.

Lynne Peterson, Superintendent of Savage Schools, will be the fiscal representative for the LEA. She will be in charge of purchasing books, SurveyMonkey subscriptions and EXCELS software for iPADS for all four districts. She will also arrange for food and refreshments at the PIR and Early Release training sessions. Ms. Peterson along with superintendents Renee Rasmussen of the Bainville Schools, Larry Crowder of the Culbertson Schools and Corrina Guardipee of the Frazer Schools will also work with MSU faculty to design a needs assessment for teachers and will make suggestions about curriculum and resources used in the training sessions and in the EDCI 588 class. All three superintendents will advertise the data literacy training and offer participation to non-public schools and teachers in their districts.

Cathy Ziebarth, an adjunct instructor at MSU in the department of Education and a business and computer science teacher in the Livingston Public Schools, will participate as the online facilitator for the EDCI 588 Data Literacy for Teachers course. Mrs. Ziebarth’s strengths in using EXCEL software and SurveyMonkey in
her high school classes make her an excellent facilitator of online instruction that promotes the uses of these software systems in collecting and analyzing data – especially in terms of how they can also be used in classrooms with students. Mrs. Ziebarth will also travel to Eastern Montana for all four training sessions and will help co-facilitate those with Dr. Versland.

*Adequacy of Resources and Cost Effectiveness*

The following budget narrative reflects for costs to train approximately 105 teachers and administrators from four Eastern Montana rural schools. Although more teachers from other rural schools such as Lambert or Richey may be invited to attend the PIR and Early release day trainings, this budget would not be able to support tuition for the EDCI 588 Data Literacy course offered through Extended University. **On the basis of this budget, cost per participant is $677.20 to participate in all training sessions and the EDCI 588 class with all materials.**

No partner will benefit from more than 50% of the Title IIA grant funds. This budget reflects that partner allocations will be as follows:

Partner #1 MSU Dept. of Education will benefit from 38.89% of grant funds;

Partner #2 MSU Dept. of Mathematical Sciences will benefit from 13.51% of grant funds, and

Partner #3 LEA (Savage, Culbertson, Bainville and Frazer Schools) will benefit from 47.64% of funds.

**Partner #1 MSU Department of Education**

MSU Faculty from the departments of Education and Mathematical Sciences will develop curriculum materials, and provide training and support to 105 rural educators during 1 ½ PIR days at the beginning of the K-12 school year in August 2015. Additionally, faculty will provide (3) ½ days of face to face instruction along with ongoing online instruction during fall semester of 2015 for a two credit graduate class, EDCI 588-853 Data Literacy for Teachers.

During the summer of 2015, Education and Mathematical Sciences faculty will work with rural school leaders to develop a needs assessment to use with all participating rural districts. The results of that needs assessment will enable faculty to design a contextualized training experiences to help rural school teams develop
strategies for creating data literate cultures in their respective schools. Rural schools will come together for mass training and professional development experiences to be held in August a joint PIR day and three more Early Release sessions at one of the rural schools. The PIR and Early Release Day professional development trainings will be led by Education faculty.

In the fall of 2015, approximately one hundred five (105) educators from schools in rural Eastern Montana will enroll in the graduate class, EDCI 588-853 Data Literacy for Teachers. This course will be taught in a blended format with one Education faculty member and one adjunct instructor delivering face to face instruction on three (3) separate days in September and October; the remaining class meetings will be held online using D2L. This course organization will require teachers to do some prior reading and data collection before they come to the face-to-face sessions; it will also provide on-going support for teachers as they return to their classrooms to implement what they have learned. D2L communications will be designed for teachers to ask questions, participate in discussion and share ideas to reinforce their use of newly acquired data analysis skills.

**MUS policy is that the one month summer salary pay rate for a faculty member is equivalent to one-ninth of their base Academic Year pay rate. One month salary + 20% benefits for faculty is listed below.**

**Sarah Schmitt-Wilson, Co-PI** – meet with superintendents, create needs assessment, design curriculum, and procure materials for PIR /Early Release trainings and EDCI 588 course , design EDCI course and evaluate program
- (One month of summer salary = 1/9 of base salary $45,000 = $5000 + 20% = $6,000) **$6,000.00**

**Cathy Ziebarth**, adjunct instructor, will co-facilitate the PIR days and will co-teach the 75-80 teachers in the EDCI 588 course onsite in Eastern Montana and in the blended D2L format - ( Adjunct instructor salary for 1 month; since Mrs Ziebarth is a part time adjunct, no benefits are figured. **$5,000**

**Sarah Orr**, graduate assistant, will travel to Eastern Montana, assisting with training there, she will also help facilitate the EDCI 588-853 course. One month salary + benefits ( $1000 + $20) = **$1,020**

**Honorarium of $500 for additional training support** = **$500**

**Grant Principal Investigator, Tena Versland**, work with Extended University to organize the fall course, act as the liaison with school districts, develop curriculum materials, co-facilitate PIR days, and co-teach the EDCI 588 course in Eastern Montana. One month salary = (1/9 of $60,099 = $6678 + 20% benefits = **$8,014**
Total Education Department Salaries and Benefits Total = $20,534

Travel expenses will be incurred to drive to Eastern Montana to facilitate PIR/Early Release days and teach the EDCI 588 course. This will entail 4 separate trips using a rental car and staying in hotels for two days (two separate rooms) on each of four trips. Additionally, meals will paid at the allowable state rate. Mileage from MSU to Savage, MT is 400 miles one-way. Each trip = 800 miles.

**Rental Car** - $40/day * 4 days/trip = $160.00/trip * 4 trips = $640.00 + $100 gas/trip = $400 = $1,040.00

**Lodging** - 2 nights @ $90/night = $180 * 2 instructors = $360 lodging costs/trip * 4 trips = $1,440.00

**Meals** – 3 days * $23/day = $69/person * 4 instructors = $276/trip * 4 trips = $1,104.00

In-state Education Department Travel = $3,584.00

Sub - Total Education Department Faculty Salaries and Travel Expenses = $24,118.00

Indirect Costs @ 8% + LEA indirect costs (not including tuition) @ 8%

= $1,930.00 + $1,576.00 = $3,506.00 - Total indirect costs = $3,506.00

Total Education Department Partner Costs = $27,624.00

Partner # 2 MSU Department of Mathematical Sciences

**Faculty Salary** - Jennifer Green, Co-PI, MSU Mathematical Sciences, will help develop needs assessment, design curriculum and procure course materials during one month in the summer of 2015. Jenny Green – 1 month summer salary (1/9 of $66,712 = $7412 +20% ($1483) = $8,895

Sub-Total Department of Mathematics Partner Costs = $8,895.00

Indirect Costs @ 8% = $712.00

Total Mathematics Department Partner Costs = $9,607.00

Partner # 3 LEA –

Savage Public Schools

Rural Teacher/Team Training
Costs appropriated to the LEA (Savage Schools) include all materials and books for the PIR day trainings and the subsequent EDCI 588-853 course. Those are figured in at $100/participant. Tuition costs through Extended University are included at $135/participant. In addition to district team training on data literacy, school teams will also gain training using SurveyMonkey and Excel to help them better understand data collection and analysis of perceptual data from teachers, parents and community members. Ten subscriptions to SurveyMonkey and 30 subscriptions to Excel for iPADS are also included in the LEA cost appropriations. Savage Schools will also be charged with providing lunches for the PIR days and the 3 EDCI 588-853 Data Literacy Course meetings. Specific costs are included below:

Books and materials @ $100/participant * 75 participants = $10,500.00

Tuition via EU @ $135/participant * 75 participants = $14,175.00

SurveyMonkey ($300 * 10) and Excel for iPADS ($110 * 30) = $7,400.00

Refreshments for 4 meetings for 100 people ($350/meeting * 4) = $1,800.00

Total LEA (Savage Schools) Partner costs = $33,875.00

Sub - Total All Partners Direct Cost = $66,888.00

Indirect Costs @ 8% = $4,218.00

Title II A Grant Grand Total = $71,106.00
References


### FORM 5: Budget

<table>
<thead>
<tr>
<th>Personnel Services</th>
<th>Cost Basis (salary, wage, item cost)</th>
<th>Formula ((.x\ FTE\ or\ #\ of\ hours = amount))</th>
<th>Budgeted Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tena Versland, Sarah Schmitt- Wilson, Sarah Orr, (Graduate Student)</td>
<td>1/9 (60,099 ) + 1/9 (45,000) 1.0 FTE GRA = $1,000</td>
<td>$12,678</td>
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<tr>
<td>2</td>
<td>Hourly Wages</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Employee Benefits</td>
<td>20% of 1 month salary 20% ($6678) + (5000) =$2336 GRA benefits $20</td>
<td>$2,356</td>
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</tbody>
</table>

**4 Total Personnel Services**

$15,034

### Operating Expenses

| 5                  | Contracted/Prof Services CO -Teach & facilitate EDCI 588-853 | $5,000 | $5,000 |
| 6                  | Stipends 1 - $500 honorarium for training help | $500 | |
| 7                  | Materials and Supplies |                                              | |
| 9                  | Employee Travel 4 Trips to Eastern MT (12 days) $1440 hotel + $1040 car+$552 meals | $3,584 | |

**1 Total Operating Expenses**

$24,118

**2 Total Direct Costs (Lines 4+11)**

$24,118

**3 Indirect Costs (<8%)**

8% Dept. Ed + LEA 8% (19,700) 1.930 + 1576

$3,506

**4 Total for School of Education**

$27,624

### B) Costs for College of Arts and Sciences

<table>
<thead>
<tr>
<th>Personnel Services</th>
<th>Cost Basis (salary, wage, item cost)</th>
<th>Formula ((.x\ FTE\ or\ #\ of\ hours = amount))</th>
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</thead>
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<tr>
<td>1</td>
<td>Jennifer Green 1 month Summer salary</td>
<td>1/9 (66, 712)</td>
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<td>2</td>
<td>Hourly Wages</td>
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<tr>
<td>3</td>
<td>Employee Benefits</td>
<td>20% of 1 month salary 20% (7412)</td>
<td>$1,483</td>
</tr>
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</table>

**4 Total Personnel Services**

$8,895

### Operating Expenses

| 5                  | Contracted/Prof Services |                                               | |
| 6                  | Stipends |                                              | |
| 7                  | Materials and Supplies |                                              | |
| 9                  | Employee Travel |                                              | |

**1 Total Operating Expenses**

$0

**2 Total Direct Costs (Lines 4+11)**

$8,895

**3 Indirect Costs (<8%)**

8% $712

**4 Total for College of Arts and Sciences**

$9,607

### C) Costs for LEA

<table>
<thead>
<tr>
<th>Participant Costs</th>
<th>Cost Basis (salary, wage, item cost)</th>
<th>Formula ((.x\ FTE\ or\ #\ of\ hours = amount))</th>
<th>Budgeted Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Savage Public Schools</td>
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<tr>
<td>2</td>
<td>Stipends/Substitutes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participant Costs</td>
<td>Cost Basis (salary, wage, item cost)</td>
<td>Formula (x FTE or # of hours = amount)</td>
<td>Budgeted Amount</td>
</tr>
<tr>
<td>-------------------</td>
<td>--------------------------------------</td>
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<td>-----------------</td>
</tr>
<tr>
<td>1. Contracts (Names: )</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>2. Stipends/Substitutes</td>
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<td></td>
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</tr>
<tr>
<td>3. Materials and Supplies</td>
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<td></td>
</tr>
<tr>
<td>4. Communications</td>
<td></td>
<td></td>
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<tr>
<td>5. Non Employee Travel</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>6. College Credits/Tuition</td>
<td>$135/participant - 2 cr EU</td>
<td>$135 * 105 participants</td>
<td>$14,175</td>
</tr>
<tr>
<td>7. Other (Specify)</td>
<td>Food for training meetings</td>
<td>$450/meeting * 4</td>
<td>$1,800</td>
</tr>
<tr>
<td>8. Total Budget for Partner Schools</td>
<td></td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

| A | Total for School of Education (not to exceed 50%) Line A14 | 38.89% | $27,624 |
| B | Total for College of Arts and Sciences (not to exceed 50%) Line B14 | 13.51% | $9,607 |
| C | Total for LEA (not to exceed 50%) Line C8 | 47.64% | $33,875 |
| D | Total for Additional Partner (not to exceed 50%) Line D5 | 0.00% | 0 |
| E | Grand Total | | $71,106 |

Institutional Grants Officer/Fiscal Department
APPENDIX A

STATEMENT OF ASSURANCES

The applicant hereby provides assurance to the Montana Office of the Commissioner of Higher Education that if a grant is received under the terms of the Improving Teacher Quality State Grant, Title II, Part A, it will:

Comply with audit requirements in accordance with the Federal Office of Management and Budget (OMB) Circular A-128 or A-133 as appropriate, and supply the Office of the Commissioner of Higher Education with a copy of the audit report for each fiscal year in which grant funds were expended within 60 days of the completion of the audit;

Comply with the administrative procedures of the Office of the Commissioner of Higher Education and all regulations, policies, and requirements, including Public Law 107-110; Education Department General Administrative Regulations (EDGAR) and the Office of Management and Budget Circulars No. A-102, A-110, A-133, and applicable cost principles (Circulars: A-21 Educational Institutions, A-87 Cost Principles for State and Local Governments, and A-122 Nonprofit Organizations) as they relate to the application, acceptance, and use of federal funds for this federally assisted project;

Comply with Title VI of the Civil Rights Act of 1964 (race, color, national origin), Section 504 of the Rehabilitation Act of 1973 (handicapped), Title IX of the Education Amendments of 1972 (sex) and the Age Discrimination Act of 1975 (age);

Retain all records for a period of five years and give the Office of the Commissioner of Higher Education, the Federal sponsoring agency or the State Auditor through any authorized representatives access to and the right to examine all records, books, papers, or documents related to the grant;

Comply with all provisions of the Title II, Improving Teacher Quality State Grants, Part A and make public all products (e.g., example capstone curricular materials including student assignments, tasks, prompts, and research and project ideas, assessment rubrics, performance exemplars, etc.) resulting from the project and in a format that can be posted to a web site and used by Montana school divisions and teachers.

Seek to provide greater access to all core academic disciplines to historically underrepresented and underserved groups;

Enter into agreement for professional development with school(s), school district or consortium of school districts or nonpublic schools in the area of proposed grant activity; and

Ensure equitable participation of personnel from nonpublic (private) schools to the extent feasible.

Montana State University

Dr. Martha Potvin

Provost

X

Chief Academic Officer/ Executive Director
APPENDIX B

Letter of Support – Savage Public Schools

SAVAGE PUBLIC SCHOOLS
ELEMENTARY DISTRICT NO. 7 & H.S. DISTRICT NO. 2
RICHLAND COUNTY-SAVAGE, MONTANA 59262
(406) 776-2317 FAX (406) 776-2260

October 29, 2014

Dear Title II A Teacher Quality Grant Committee,

I am writing to support the grant request of Dr. Tena Versland, Montana State University for the “Creating a Culture of Data Literacy in Rural Schools” OCHE grant. I am the superintendent of the Savage Public School District and will participate in this grant as the Local Education Agency partner. Our school meets the eligibility criteria for student poverty with this grant as we currently have 26% of our students qualifying for free or reduced meals. Additionally, because I was not able to hire a business teacher (no one applied) I have teachers who are not endorsed in business facilitating digital academy classes for students in the business/computer science area- I know that another criterion for this grant is to have teachers who are miss-assigned or not fully endorsed. Our teachers are fully endorsed, but I do not consider the business classes we are offering through Digital Academy to be a high quality experience for our students; many have told me that they dislike this approach to learning.

I consider Eastern Montana rural schools to be underserved in terms of professional development for teachers. Because we are so far from any university, many times professional development opportunities that are face to face are few. Some teachers have taken online classes; but in general, feel that this approach isn’t what they are looking for. To have MSU faculty come to Eastern Montana to deliver face to face training and professional development around organizing and analyzing data specific to our school represents a wonderful opportunity to improve instruction and school programs for our teachers at Savage and in other rural schools in the eastern part of our state. The timelines of our teachers getting data literacy training with implementation of common core state standards and SBAC training is very much appreciated.

Additionally, Savage Public School will abide by any and all OCHE grant criteria and regulations in terms of our participation as the Local Educational Agency for this grant.

If you have any questions, please contact me. Thank you for this opportunity.

Lynne Peterson
Dear Title II A Teacher Quality Grant Committee,

I am writing to support the grant request from Dr. Tena Versland, Montana State University for the "Creating a Culture of Data Literacy in Rural Schools" OCHE grant. I am the superintendent of the Frazer Public School District and we agree to participate in this grant as the local partnering agency. Our school meets the eligibility criteria for students with poverty at 80%. With this grant as we currently have over 60% of our students qualifying for free or reduced lunch. It is also important that we have endorsed teachers in the area of business by having them facilitating digital academy classes for students. I know that another criterion for this grant is to have teachers who are not fully endorsed receive their endorsement.

I consider Eastern Montana rural schools to be underserved in terms of professional development for teachers.

Additionally, Frazer Public School will abide by any and all OCHE grant criteria and regulations in the terms of our participation as the Local Educational Agency for this grant.

If you have any questions, please contact me at your convenience. Thank you for this opportunity.

Respectfully,

Corrina L. Guardipee-Hall Ed. S.
Superintendent
APPENDIX C

Key Personnel

**PI, Tena Versland**, is acting as the liaison between Montana State University and the participating school districts. She has been in discussions with the superintendents of Savage Bainville and Culbertson in the planning of this proposal. In late spring or early summer, Dr. Versland will meet again with these superintendents to arrange PIR and Early Release Day schedules and design a needs assessment that will be given to all teachers in these three schools. The results of the needs assessment survey will determine the goals and activities for the PIR day and Early Release day training sessions. Dr. Versland, will travel to Eastern Montana to facilitate PIR Day training and Early Release days trainings. She will also co-teach the EDCI 588 course portion that is delivered face to face in Eastern Montana. Following the completion of the training sessions and EDCI 588 course, Dr. Versland will work with co-PI’s to evaluate the success of the program. She will be responsible for submitting all quarterly budget and status reports to OCHE, will arrange enrollment of students for the EDCI 588 course and all tuition payments through Extended University.

**Co-PIs, Sarah Schmitt-Wilson and Jennifer Green** will participate in the discussions to develop a needs assessment, will create the needs assessment survey and will disseminate the assessment to all teachers in the Savage, Culbertson and Bainville schools. Dr. Wilson and Dr. Green will then use the results of the needs assessment to design curriculum training materials and create resources for training sessions. They will also procure materials for the EDCI 588 course and will create the course in D2L along with assignments for students between the face to face meetings. Following the completion of the data literacy training sessions, the Co-PI’s will send a post-training assessment to evaluate the success of the program. Dr. Wilson and Green will also collaborate in analyzing the data from the assessment and making recommendations for program evaluation and next steps.

**Lynne Peterson, Superintendent of Savage Schools**, will be the fiscal representative for the LEA. She will be in charge of purchasing books, SurveyMonkey subscriptions and EXCEL software for iPADS for all three districts. She will also arrange for food and refreshments at the PIR and Early Release training sessions. **Ms. Peterson along with superintendents Renee Rasmussen of the Bainville Schools and Larry Crowder of the Culbertson Schools** will also work with MSU faculty to design a needs assessment for teachers and will make suggestions about curriculum and resources used in the training sessions and in the EDCI 588 class. All three superintendents will advertise the training and offer participation to non-public schools and teachers.

**Cathy Ziebarth, an adjunct instructor at MSU in the department of Education and a business and computer science teacher in the Livingston Public Schools**, will participate as the online instructor for the EDCI 588 Data Literacy for Teachers course. Mrs. Ziebarth’s strengths in using EXCEL software and SurveyMonkey in her high school classes make her an excellent facilitator of online instruction to promote these software systems in collecting and analyzing data – especially in terms of how
they can also be used in classrooms with students. Mrs. Ziebarth will also travel to Eastern Montana for all four training sessions and will help co-facilitate those with Dr. Versland.

The Following four pages are Curriculum Vitae of all four key personnel.
CURRICULUM VITAE
Tena M. Versland, Ed. D.

430 South 7th Street                                             Office Phone: 406-994-6799
Livingston, MT 59047                                             Cell Phone: 406-220-1063
406-222-2595                                                  Email: tena.versland@montana.edu

ACADEMIC PREPARATION

Doctorate in Education Leadership
Montana State University, Bozeman, MT May 2009
Dissertation: “Self Efficacy Development of Aspiring Principals in Education Leadership Preparation Programs.”

PROFESSIONAL EXPERIENCE

Assistant Professor, Education Leadership, Montana State University 2012 - Present
- Teach masters and doctoral courses in leadership, instruction, data driven decisions.
- Research topics in rural schools, instructional leadership, educator effectiveness, leader preparation.
- PI Office of the Commissioner of Higher Education (OCHE) Data Literacy Grant 2014

Principal, Sleeping Giant Middle School Livingston, MT 1992-2012
- Lead a high poverty, rural school to outstanding student growth and achievement.
- Design, supervise and monitor the academic and social programs for 400 students.
- Hire, supervise, and support 50 teachers, paraprofessional and support staff.
- Design and deliver professional learning experiences in brain research technology and instructional strategies to K-12 teachers increase instructional efficacy.

ARTICLES IN REFEREED JOURNALS


GRANTS/EXTERNAL FUNDING


MSU COURSES TAUGHT

- EDLD 534 Data Driven Decisions
- EDCI 588-853 Data Literacy for Teachers
- EDLD 532 School Law
- EDLD 565 K-12 Instructional Leadership
- EDLD 508 Supervision of Instruction
Sarah Schmitt-Wilson
Montana State University
Department of Education
Bozeman, MT 59717
(406) 994-6670
sarahschmittwilson@gmail.com

Education

Ph.D. Educational Psychology

December 2011

Doctoral Minor: Applied Statistics and Research Methods
University of Northern Colorado, Greeley, CO
Dissertation: Direct and Indirect Effects of Social Class on Career Expectations and Likelihood of Compromise in an Adolescent Sample
Dean’s Citation for Excellence

Peer-Reviewed Publications


Research Grants


Peer-Reviewed Presentations


Versland, T., Kelting-Gibson, L., Schmitt-Wilson, S., Green, J., & Nollmeyer, G. (2014, October). Creating a Culture of Data Driven Decision: Training Educators in Data Analysis to Improve Instructional Practice and Student Academic Achievement. Presented at the National Rural Education Association annual convention, San Antonio, TX.


Jennifer L. Green

Professional Preparation

<table>
<thead>
<tr>
<th>Institution</th>
<th>Degree</th>
<th>Year</th>
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<tr>
<td>Chadron State College</td>
<td>Secondary Education (Mathematics)</td>
<td>B.S. 2004</td>
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<td>University of Nebraska-Lincoln</td>
<td>Statistics</td>
<td>M.S. 2006</td>
</tr>
<tr>
<td>University of Nebraska-Lincoln</td>
<td>Statistics</td>
<td>Ph.D. 2010</td>
</tr>
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</table>

Appointments

2013-present  Assistant Professor of Statistics, Dept. of Mathematical Sciences, Montana State University, Bozeman, MT
2010-2013  Research Assistant Professor, Dept. of Statistics University of Nebraska-Lincoln

Selected Publications


Synergistic Activities

- **Senior Personnel** for NSF-funded Program IMMERSION, 2014-present: Collaboratively developing and delivering professional development in mathematical modeling for elementary teachers in Montana
- **Co-Principal Investigator** for Title II grant-funded Creating a Culture of Data-driven Decision Making, 2014-present: Co-developed and taught data literacy seminars and summer course for teams of in-service teachers and administrators in Montana; Partnering with local school districts to help establish a culture of data-driven decision making in Montana schools; Empowering educators to use data to make classroom- and school-level decisions that help improve student learning and achievement.
- **Co-Principal Investigator** for NSF-funded Collaborative Research-RealVAMs, 2013-present: Developing and evaluating an open-source statistical program for analyzing multiple student success outcomes; Partnering with a large public school district and using the statistical program to analyze students’ longitudinal data; Creating and disseminating statistical tools that help educational evaluation systems characterize teaching effectiveness.
- **Co-Principal Investigator** for NSF-funded Data Connections, 2011-present: Developing generalized linear mixed models for analyzing student achievement data; Laying groundwork for connecting various measures of teaching quality and teacher and student attitudes to student learning trajectories; Partnering with local school districts and Math Science Partnerships (MSPs) to help develop a coherent picture of math teaching and learning.
- **Leadership Team Member** for NSF-funded NebraskaMATH, 2009-2013: Advised quantitative data collection and analyses; Developed statistical models to evaluate impact of an MSP intervention on teachers and students.
- **Co-Instructor** for NSF-funded Math in the Middle Institute Partnership and Nebraska Math and Science Summer Institutes, 2005-2013: Collaboratively developed and taught statistics courses to middle level and high school mathematics teachers from rural and urban communities in Nebraska.
EDUCATION

M.A. Curriculum and Instruction, Technology Emphasis, 2010
Montana State University, Bozeman, MT, Graduated with Honors, Master’s Thesis: Tech Time: Factors that Influence Teachers to Integrate Technology into the Classroom

Computer Science Endorsement, (5-12) June 1991

Teaching and Vocational Certification Home Economics, June 1980

B.S. Home Economics Child Development/Family Life (FCS) 1976, Montana State University, Bozeman, MT, Graduated with Honors

TEACHING

Livingston School District 4 & 1, 1981-Present

Business Teacher and Business Professionals of America Advisor - Park High School 2013-Present
– Coordinate and advise students in regional, state and national competitive business events

Computer Teacher - Sleeping Giant Middle School, 1992-2013
– Develop and teach an advanced service oriented curriculum for gifted students in technology, graphic design and art
– Develop and teach technology curriculum for 6th, 7th and 8th grade
– Plan and develop all supporting materials, assignments, tests for technology curriculum
– Test and evaluate skill level according to OPI standards
– After school yearbook production and newspaper advisor

Technology Training Coordinator, Livingston School District 2001-Present
– Plan, design and implement training for 120 teachers and administrators
– Plan, coordinate and present day long PIR day technology activities for Livingston district K-12
– Supervise seven building level technology leaders
– Develop technology curriculum for teachers, test and evaluate skill level according to OPI standards
– Oversee spending and direction of annual technology levy
– Coordinate OPI renewal units for professional development
– Train paraprofessional and classified staff on data management system
– Train teachers in use of data management system and grading accountability
– Coordinate district web design
– Design professional development which has included:
  Microsoft Office, Word, Excel, Publisher, Outlook, PowerPoint, pod-casting, surveys, digital photography and photo manipulation, software evaluation, hardware maintenance, presentation software, effective internet searches

Adjunct Instructor, Montana State University 2013
– Taught Professional Issues Course to undergraduate Student Teachers

PRESENTATIONS
– Guest Speaker, EDLD 565, Montana State University, July 2012 and July 2013
– Guest Speaker, Professional Issues Class, Montana State University, December 2012
– I-Safe, Internet Safety for Parents Presentation to Livingston Community
  April 2007 & 2009