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Montana Teachers of English Language Learners (MontTELLs) Ensuring Academic Support for English Language Learners

Final Evaluation Report

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Table of Contents Section I Introduction	3
Background	4
Overview of the MontTELLs Grant Project Goals and Objectives	4
MontTELLs An Exemplary Model of Professional Development for K-12 Teachers Section II Methodology	
Purpose	7
Participants	8
Participant Recruitment	8
Instrumentation	8
Data Collection	9
Data Analysis Section III Results	
Cohort and Program Participants	10
Study Question 1 Quantitative Results	10
Study Question 2 and 3 Qualitative Findings and Project Impacts	14
Braiding Indian Education For All and SIOP	14
Networking Teachers to Support Academic Literacy Across the Curriculum	16
MontTELLs Transformational Professional Development	16
Intangible benefits of recognizing and validating ELLs Section IV Broader Impacts	
Instructional Technology Gains and Effective Distance Learning	18
Lessons Learned and Challenges Met	18
Academic Merit and Scholarly Contributions	18
Program Effectiveness	19
Project Outcomes Section V Conclusion and Recommendations	
Future Challenges	21
References	22
Table 1. Indicators of Success-GPRA Measures, Project Specific Measures and ProductsTable 2. Descriptive statistics of Cohort and Program participantsTable 3. Baseline and Post SIOP mean scores for Programs I and II participants (n=33)	10
Figure 1. MontTELLs Goals and Objectives Figure 2. Component II Building Background SIOP Baseline and Post Observation Scores Figure 3. Baseline and Post Program Praxis Scores Figure 4. Number of Students Taught by Program II Participants 1 Year Later	12 13

Section I Introduction

The MontTELLs grant project initiated this evaluation study to determine how successful the project was in meeting its intended goals and objectives towards addressing the urgent need to provide support for K-12 regular classroom teachers across Montana so that they could meet the needs of the students in their content classes who struggle with academic English literacy and therefore, content mastery. The evaluation used a mixed methods approach to assess the extent to which the MontTELLs grant project met its outcomes for the 60+ teacher participants of ELLs in general and of AI/AN ELLs. We describe the high-quality characteristics of the MontTELLs grant project and how those qualities make it an exemplary model of professional development for engaging teachers and school leaders on learning the best ways to meet the needs of culturally and linguistically diverse students. The broader impacts and recommendations for practitioners choosing to replicate the MontTELLs model and implications for future research are described.

The MontTELLs team members were the primary developers and facilitators of the project's activities, including the internal evaluation. Formative assessment was conducted by the MontTELLs team throughout the five years. The creator of the Culturally and Linguistically Diverse Education (CLDE) graduate certificate program, Dr. Jioanna Carjuzaa, Executive Director of the CBME, Professor, and the originator of the MontTELLs grant project, served as the Principal Investigator (PI) for the entire duration of the internal and external evaluation. The PI wrote the following in the Office of English Language Acquisition (OELA) RFP regarding the need for the current study:

Of the 17 higher education institutions in Montana, none have offered consistent, comprehensive coursework towards an English as-a-second language (ESL) endorsement focused on the knowledge, skills, and dispositions K-12 licensed teachers need in order todesign lesson plans that promote English language literacy skills and content mastery simultaneously in a culturally responsive manner.

Thanks to the support of the Office of English Language Acquisition and our Program Officers, the 34 schools involved in this grant project including the teachers, their students, their administrators, the tribal community members, and the MontTELLs team who participated in the project for their contributions to this comprehensive evaluation study of professional development for teachers of ELLs.

Background

The Center for Bilingual and Multicultural Education (CBME) at Montana State University (MSU) has led the state in advancing linguistic and cultural diversity education, social justice, and Indian Education for All (IEFA) for decades. In addressing policy change by advocating for the allocation of resources and programming, the CBME has developed local, national, and internationally renowned professional development at all levels of education in the state of Montana, for students in Head Start through higher education. The CBME's long-term commitment and efforts have fostered trust across the state: from the revitalization and maintenance of Indigenous languages, facilitation of culturally responsive pedagogy in K-12 schools, including the integration of IEFA across the curriculum in all content areas and at all grade levels, academic support for American Indian ELLs, and professional development for Class 7 Indigenous language and culture teachers as well as a variety of other projects designed to promote social justice by increasing cultural sensitivity. From the words of Jonathan Eagleman, a MontTELLs participant who spoke about the urgency of this dire need in the MontTELLs documentary.

All of us who have had those language speakers[heritage language speakers] in our lineage we are English language learners and it's time to use that as an advantage in the academic systems that serve our schools, we're in a predicament as far as our community language vitality goes we're slippingdeeper into the totally threatened realm really come to the point prophesied by the old peoplethat says that your language is going to float away like the clouds

- Jonathan J. Eagleman, Ojibwe K-12 Instructor, Box Elder School, Montana

Overview of the MontTELLs Grant Project Goals and Objectives

With the generous support of the Office of English Language Acquisition support of the grant project, the Montana Teachers of English Language Learners (MontTELLs) has provided professional development and mentoring/coaching to two groups of secondary teachers who experienced two distinct professional development programs. The goal at the onset was to determine the most effective way to support teachers of ELLs. Partner schools were randomly assigned to one of two programs, and all participants in that school received the program randomly selected for that school.

The design of Program I consisted of an intensive five-week online course addressing language acquisition theories and instructional strategies for teaching ELLs followed by mentoring. Program II involved 12 credits of graduate study coursework towards a Culturally and Linguistically Diverse Education Certificate spread over two summers with mentoring provided during the academic year. This final evaluation report of the MontTELLs grant project presents the results of Programs I and II.

To meet these goals the MontTELLs grant project worked towards three objectives, which evolved over the duration of the project. Figure 1 shows how the MontTELLs grant project's goals align with the actionable objectives met and exceeded by the project.

MontTELLs Final Evaluation

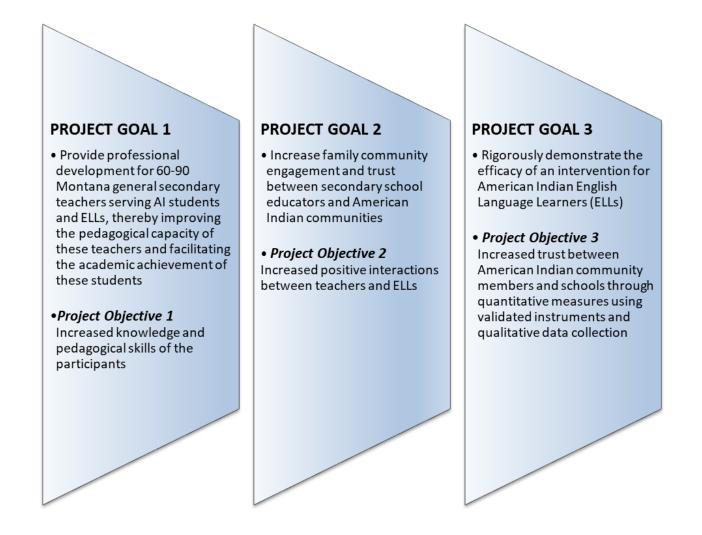


Figure 1. MontTELLs Goals and Objectives

MontTELLs An Exemplary Model of Professional Development for K-12 Teachers

Especially important to emphasize is the MontTELLs professional development is proven to be a model of innovation and should be shared widely. Program II was designed for in-service teachers where four three-credit graduate courses were thoughtfully designed with intention to provide the CLDE certificate program described here, one-on-one coaching with a faculty member from higher education with expertise in implementing the Sheltered Instruction Observation Protocol (SIOP) method, and professional development in relationality, i.e., building and nurturing relationships by embracing the Family Education Model (FEM) for community engagement opportunities.

Table 1. Indicators of Success-GPRA Measures, Project Specific Measures and Products

GPRA PerformanceMeasures	 Nearly 100 educators were recruited for Programs I and II applied and 63 completed professional development with MontTELLs. 15 teachers completed Program I and 48 more from Program II the CLDE certificate program. Thirty-four schools and School Leaders participated and supported the project. Community engagement was ongoing and MontTELLs participants served as community liaisons for the Courage to Teach workshops.
Project-Specific Measures	 Each Program had cohorts for a total of six cohorts. Program II participants experienced one-on-one mentoring with an instructionalcoach to learn the Sheltered Instruction Observation Protocol Eight instructional coaches provided one-on-one coaching. Participants increased their skills through hands on learning, observations, and feedback. Two more teacher assessments: the CLASS, and Praxis Exam were administered.
Product Outcomes and Deliverables	 MontTELLs Conference reached thousands and school districts across Montana, and other organizations involved in the MontTELLs grant. Conference meeting attendees included MontTELLs, teachers, school leaders, MSU students and faculty, university leaders, evaluators, and OPI officials. Documentary Film, MontTELLs Braiding Indian Education with AcademicLiteracy Skills in English, documentary film.

MEASURE INDICATORS OF SUCCESS

Section II Methodology

The MontTELLs grant project was designed to address the urgent need to provide support for K-12 regular classroom teachers across Montana so that they could meet the needs of the students in their content classes who struggle with academic English literacy and therefore, content mastery. Formative evaluation throughout the years of this grant led to necessary modifications of the originally proposed evaluation plan. OELA approved these modifications, as described in detail throughout the Executive Summary and bulleted on pages 32-38. These modifications were critical to meeting the context-specific needs of the individuals and school communities participating in the project.

Purpose

The purpose of this evaluation was to assess the effectiveness of the MontTELLs grant project in meeting the above-mentioned objectives. The external evaluator gathered input from the Principal Investigator and Technology Coach to conduct a data audit of the evaluation by the internal evaluator. The evaluation focused on the following overarching questions related to the identified need for the proposed work:

- 1. What is the K-12 secondary classroom teachers' quality of Sheltered Instruction Observation Protocol (SIOP) instruction and CLASS scores as measured at three pointsduring the program?
- 2. How well did the MontTELLs grant project prepare the teachers to work with ELLs by increasing their culturally responsive pedagogical knowledge, skills, and dispositions?
- 3. How well was the MontTELLs PI's vision to prepare the participants, the secondary teachers, so they could support their students' academic literacy skills while teachingthem grade appropriate content realized?

The MontTELLs project is a longitudinal comparative research project developed to design, provide, and study a professional development program promoting culturally and linguistically diverse education and IEFA for participating teachers, instructional coaches, and school leadersas well as addressing how best to nurture family engagement. A mixed-methods design is considered a valuable way to collect self-reported changes in knowledge, actions, and attitudes of the people involved and the conditions in educational transformation initiatives.

To evaluate the MontTELLs grant project, we prioritized Indigenous evaluation methods. Due to sample size limitations, a mixed methods research design was deemed more valuable and thought to offer more rigorous and authentic evaluation methods to respect the individuals engaged and the communities highlighted in the project. Descriptive statistics and qualitative methods were selected as these were considered more reliable by the MontTELLs team since they viewed relationality as of paramount importance to the work. The interviews, course evaluation feedback, and survey data of the project were organized and analyzed for themes with theoretical sensitivity to ensure authenticity and trustworthiness of thefindings.

Participants

Prior to the MontTELLs grant, only 53 teachers in the state had an ESL endorsement. Dr. Carjuzaa made the insightful decision to develop and provide linguistic and culturally responsive professional development for secondary teachers. MontTELLs, a longitudinal comparative study, was designed to provide professional development to core-curriculum, secondary regular classroom teachers to raise the academic achievement of ELLs in Montana and narrow the achievement gap between Native and non-Native students.

Participant Recruitment

The grant met and exceeded its expected outcomes, and with its robust data collection, this unique one-of-a-kind study on professional development to best meet the needs of ELLs serves as a distinctive model for national and international application. One hundred secondary regular classroom teachers in the partner schools were recruited and randomly assigned to one of two programs. All participants in that school received the programrandomly selected for that school.

Baseline assessment data on teachers participating in all three cohorts in Programs I and II were collected. These included the Praxis scores, Sheltered Instruction Observation Protocol (SIOP) checklist, and Classroom Assessment Scoring System-Secondary (CLASS-S) observations from the instructional coaches. Additionally, interviews were conducted with school leaders on the teacher's knowledge when the teachers completed the program.

Instrumentation

The MontTELLs grant project used several instruments to evaluate the relevancy, transformation, learning outcomes, and the overall impact of the CLDE graduate certificate program for secondary teachers. The key observation tool selected for this research study, the SIOP, identifies the features of sheltered instruction that can enhance and expand teachers' instructional practice (Echevarria, Vogt, & Short, 2016). The SIOP protocol is composed of 8 components and 30 items. The measurement tool was the SIOP developed by researchers Echevarria, Vogt, and Short (2008) to rate teachers' sheltered lessons. Teachers were observed at five times, once before the program and then four more times, once a semester, during the next two academic years. The SIOP model are reflected in the 30 items that can be scored by the instrument. The highest possible score on the SIOP is 120 (i.e. $30 \times 4 = 120$). The components include Lesson Preparation, Building Background, Comprehensible Input, Strategies, Interaction, Practice/Application, Lesson Delivery, and Review and Assessment.

After each observation, a SIOP was completed on the teacher, and a score was assigned for each of the 30 items. The researchers shared these analyses with the teachers on an ongoing basis as a means of facilitating teacher growth and validating the research interpretations (Echevarria, Vogt, & Short, 2002).

Data Collection

The evaluation data come from data sources collected by personnel over a 5-year period. Data were collected, analyzed, and reported in accordance with reporting requirements of the agency, and findings from the evaluation reflect the approved modifications made and reported on in the Principal Investigator's ED 524 Narrative Final Report.

Data Analysis

The data analysis determined the outcomes and impacts for teachers and their school leaders using both quantitative and qualitative methods. The quantitative data included three teacher assessments which were combined in one Excel file and analyzed with QI Macros. The dataset was also cleaned and imported and analyzed in STATA. This robust dataset has 75 observations/participants. The sample includes teachers from 34 schools who participated in the MontTELLs project; of the 75 observations, we had a total of 48 teachers who completed the CLDE certificate program and of those completers one-third of them were AI/AN. We initially aimed to determine if there were any mean group differences between programs, a clustered random design (Program I, n = 15 and Program II, n = 48). It was decided to focus the analysis on descriptive statistics and the mean differences of Baseline, Interim and Post scores by Cohort. The sum of scores for knowledge outcomes were analyzed to assess overall teacher learning.

Qualitative data was used to evaluate the value of this unique CLDE model for teachers in Montana. Interview data, the transcript from the documentary, and other media were organized into categories – memos, reports, literature, press, survey data, focus groups and interviews (teacher and school leaders) and products, such as the documentary film transcript. These documents were analyzed in NVivo software. Constant comparative analysis was used to distill individuals' comments. The school leader interview protocol included open-ended questions that asked school leaders to discuss the effectiveness and their perceptions about the impact of MontTELLs PD on student outcomes, teacher/student relationality, and school improvement because of teachers who participated in MontTELLs. Other data included meeting notes and emails of MontTELLs team members that asked individuals to provide feedback on the MontTELLs many gatherings, meeting benefits, activity worthiness, motivation, and participant recommendations.

Section III Results

Cohort and Program Participants

Of the 100+ teachers recruited, 63 teachers successfully completed Programs I and II of the MontTELLs grant project. Through MontTELLs, the number of teachers prepared to meet the needs of culturally and linguistically diverse students has increased from 53 to 116 teachers who are now endorsed in ESL. Fifteen teachers from Program I completed the OPI online course on meeting the needs of ELLs. Forty-eight teachers from Program II earned the CLDE certificate. Forty- seven non-Native and sixteen Native teachers participated in and successfully completed Programs I and II of the MontTELLs grant project. All participants in Program I were non-Native except forone participant who was Native. In Program II, 15 of the 48 completers were Native.

For a complete set of scores on all the assessment variables (observations), we decided to select the three observations with data entries on all the variables. The Praxis scores were collected by the evaluator from teachers who completed the CLDE graduate program certificate.

Variable	n	Mean	Std. Dev.	Min	Max
Cohort	63	2.33	.74	1	3
Program	63	1.76	.43	1	2

Table 2. Descriptive statistics of Cohort and Program participants

Study Question 1 Quantitative Results

1. To answer Study Question 1, what is the K-12 secondary classroom teachers' quality of Sheltered Instruction Observation Protocol (SIOP) instruction and CLASS scores as measured at two points during the program?

The eights components for the SIOP questionnaires were averaged to obtain the mean scores and compare Baseline to Post program scores. The scores could range from 0 to 5, with a 4 or 5 representing a positive perception for the components. The results of the descriptive statistics are presented in Table 2 for the eight components.

The Sheltered Instruction Observation Protocol connected best to the purposes of the community of practice and measured the changes in the participants' (N = 63) instruction over a two-year period. Study Question 1 was analyzed with descriptive statistics using the instructional coaches' observations measured by the SIOP. Each of the 30 items measured are grouped into one of the eight components scored by the SIOP. Therefore, in each of the 63 observations, when applying the SIOP as the measure, the highest possible score would be 120 (i.e. $30 \times 4 = 120$).

Preparation and preliminary analyses began with the dataset, which was cleaned and examined for missing values. Cases with missing values were systematically removed from the data set and were excluded from the analysis. Only those participants with data on all study variables were

included in the final analyses. I calculated descriptive statistics, including frequencies and percentages for the categorical variables to understand the state of the variables. Scores from the MontTELLs dataset were reviewed and cleaned in Excel. The dataset was analyzed in STATA IC 17. The data was recoded on a Likert scale (1 -5) to standardize the scores due to the small sample size it was essential to have pre and post data for each person included in the sampling frame. Participants who had Baseline scores and Post Observations were selected for this withingroup sample.

SIOP scores of the sample (n = 33) from Program II indicate dramatic gains in their SIOP scores from an average mean Baseline score of 2.47 to 4.62. In addition, observations and notes from the eight instructional coaches all 48 teachers exhibited changes to their pedagogical philosophies due to their involvement in the MontTELLs community of practice. The degree of SIOP model implementation was analyzed across three points, Baseline, Interim and Post, for each Cohort ofPrograms I and II. Table 1 shows the total average score on the SIOP for each Cohort as well as the average scores for each of the eight components measured by the SIOP.

Table 3 The Sheltered Instruction Observation Protocol (SIOP)®, Baseline and Post Program Instructional Coach Observations and the mean scores of participants which range from 1 = Not Evident to 5 = Highly Evident. Additionally, scores are reported as overall average scores for teachers' levels of SIOP model implementation of the sheltered instruction lessons for ELLs. Teachers' SIOP implementation scores from the observations and CLASS scores were also reviewed to determine the effect of teachers' implementation of the SIOP model.

	Program II		
	Baseline M	Post M	
Component I. Lesson Preparation	2.47	4.30	
Component II. Building Background	2.49	4.15	
Component III. Comprehensible Input	2.98	4.62	
Component IV. Strategies	2.65	3.98	
Component V. Interaction	2.36	3.89	
Component VI. Practice and Application	2.89	4.42	
Component VII. Lesson Delivery	2.51	4.39	
Component VIII. Review/ Assessment	2.84	4.14	
Total SIOP Score	2.47	4.23	

Table 3. Baseline and Post SIOP mean scores for Programs I and II participants (n=33)

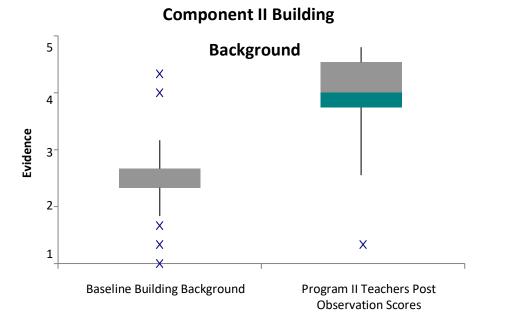


Figure 2. Component II Building Background SIOP Baseline and Post Observation Scores

In the above Figure 3 and Table 4 below, you will see the dramatic improvement teachers show from Baseline to Post program. For example, on Component II: Building Background Baseline to Post score, which was typical of the SIOP scores component, was found statistically significant.

	Baseline Observation Scores	Program II Teachers Post ObservationScores	95% ConfidenceInterval		
Mean	2.47	4.30			
Variance	0.131	0.648	2.448	10.03	
Observations	33	33			
df	32	32			
F	4.96				
P(F<=f) one-tail	0.000	0.000	Two-tail		
F Critical one-tail	1.80				
One-tail	Reject Null Hypothesis because $p < 0.05$ (Variances are Different) Reject Null Hypothesis because $p < 0.05$ (Variances are Different)				
Two-tail					

Table 4. F-Test for Two-Sample Variances of Program II Participants

In addition, the CLASS observational tool was used. It is a research-based tool used to measure, evaluate, and improve teacher-student interactions since the interactions teachers have with their students' impact learning, development, and even lifelong achievement. Instructional Coaches

collected CLASS-S data on each teacher once a semester. CLASS has 12 individual items and 4 dimensions. The total average score on the four dimensions measured by the CLASS. CLASS® observers rate each dimension on a 7-point scale, from low to high. Scores of 1-2 mean the quality of teacher-child interactions is low. Classrooms in which there is poor management of behavior, teaching that is purely rote, or that lack interaction between teachers and children would receive low scores. Scores of 3-5, the mid-range, are given when classrooms show a mix of effective interactions with periods when interactions are not effective or are absent. Scores of 6-7 mean that effective teacher-child interactions are consistently observed throughout the observation period. The average scores received by MontTELLs teachers were 4.03 for the Baseline overall score and 4.43 Post.

The Praxis ESOL exam was selected to collect pre- and post-program data from each participant. The Praxis ESOL exam is for those who plan to teach ESOL (English to Speakers of Other Languages) in elementary or secondary schools. It tests your knowledge of linguistics and pedagogy related to teaching English as a second language. In figure one Praxis scores increased in Praxis score 153.4 to 160.7.

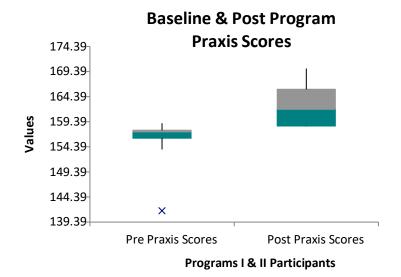


Figure 3. Baseline and Post Program Praxis Scores

In sum, all three of these instruments were used to collect Baseline and Post program data on all participants in Programs I and II of all cohorts. Though the Praxis scores analysis failed to reveal any significant differences in scores from the pre to post Praxis, and specific limitations of the Praxis may help explain these results. Activities of the MontTELLs grant project are more clearly illustrated in the SIOP results and we recommend this tool for future projects to build communities of reflexive teachers engaged in culturally responsive pedagogical activities such as ongoing coaching and rigorous coursework can lead to improvements in teaching.

Study Question 2 and 3 Qualitative Findings and Project Impacts

- 2. How well did the MontTELLs grant project prepare the teachers to work with ELLs by increasing their culturally responsive pedagogical knowledge, skills, and dispositions?
- 3. How well was the MontTELLs PI's vision to prepare the participants, the secondary teachers, so they could support their students' academic literacy skills while teachingthem grade appropriate content realized?

To answer Study Questions 2 and 3 we analyzed data from the Programs I and II with special attention to the K-12 classroom teachers who completed the CLDE graduate program certificate program regarding participation in a series of 12 professional development workshops, one-on-one time with an instructional coach, and implementation of the SIOP. As part of their participation in the MontTELLs grant project, self-reflection data were collected through an exit survey at the end of the grant. Further, a total of 14 of the 34 school leaders were interviewed. Ten of the 48 teacher participants were also interviewed by the internal evaluator at the end of program to understand how the MontTELLs professional development grant project activities impacted their teaching and students. Fifty-nine of the participants who completed their respective programs provided feedback at the end of program evaluation in a Qualtrics survey.

<u>Relationality as Fundamental to Teaching and Learning: The Family Education Model</u> MontTELLs participants in Programs I and II expressed relationality as essential to their success or lack thereof in completing the Culturally and Linguistically Diverse Education Certificate. Program II activities exemplified relationality as one of the core values of the project, by offering one-on-one instructional coaching, access to ELLs professional learning communities, and carefully designed courses for CLDE certification.

• Just understanding the importance of the entire family. As an avenue to help student improvement, it's not you know you're not helping students in a silo there are lots of pieces and parts of that student's life and their family being one of the biggest ones that can really add to their overall educational experience. The idea that, particularly in the American Indian culture that the family is the support group, and I don't want to say catering but working with the family for the improvement of all of the students and peoplein that family I think is important is an important part of understanding how education is going to work for specific cultures.

Braiding Indian Education For All and SIOP

The MontTELLs model of professional development provided school communities throughout Montana sound yet innovative methods to learn reflexively and to develop the skills and knowledge to integrate the Indian Education for All approach and the 8 components of the SIOP in their lesson planning. Culturally responsive pedagogy girded the need to advance authentic understanding around the urgent needs of English Language Learners (ELLs) in the state of Montana. The interactive methods and modes of learning from and with an instructional coach empowered teachers. MontTELLs built a critical mass of teachers who earned certification in Culturally and Linguistically Diverse Education which translated into the academic achievement of their students.

- I think just in there, you know I could give an anecdotal record of their ability to converse more about academic vocabulary, the coursework really stressed that the academic vocabulary is the piece of education that many of the ELs don't have, they don'thave the foundation for. And I would say that's one of the things that I really focused on in the classroom and, you know, we're just coming up on the end of the year, and we're talking to students and about, we're using academic vocabulary words just based on whatwe're doing
- The test scores we've really seen some improvement in our students. So we use the star reading test. And, and two classes which are literacy focused specifically I work with forESL students and their test scores have.
- It's, it's a, it's a source of pride for me how well they've done. Wonderful. Every teacher wants their students to succeed. Yeah, it's been really amazing just to watch the languagegrowth, and it's led to some more candid conversations about the use of the English language that I don't think would have happened if I didn't have an understanding of what the students were going through. I have seen an increase in the majority [not just ELs] of the students test scores, not just you know test scores and other assessment, like assessment material to, I think the students have really improved from it.
- Well, I think the scaffolding, the nature of this say master technique or way of designinglesson plans provides much more support all students every step of the way from initial say vocabulary instruction all the way through assessment. And so that's one thing I really enjoyed about this program from the beginning is that, well I understand it's geared toward. ELs, all of my students I've seen all of my students benefit from the SIOP method, and in terms of outcomes, I would say just much more comfortable and familiar with academic vocabulary and having the foundation...they need to be successful with whatever . . . in the long term.
- SIOP training really helped me to narrow what I was measuring. Like, I'm measuring your ability to do written communication within these three types of writing that we do narrative expository and argument. And this is how I'm going to be judging that improvement, making that really clear to students was a big change because we've gone through so many different rubrics but to have a rubric that really focused on language development was not just beneficial to those students who are ELLs. But again, if you allmy students are like, Oh, hey, these are conventions of English that we all struggle with. These are syntax and grammar that we all struggle with. And when you have a set of guidelines that have been vetted practice and aren't just off someone's had from like Pinterest, then you feel confident that it's the right thing to use as opposed to your best guess.

Networking Teachers to Support Academic Literacy Across the Curriculum

Multiple participants identified that a strength of the MontTELLs CLDE certificate program was having the opportunity to learn about the expected academic standards with others in a safe way. This mode of learning offered timely feedback in the coursework and in working with the instructional coaches about their progress, applicable critiques, and relevant suggestions. MontTELLs activities empowered teachers through the project's scaffolded approach and fostered a community of reflexive learners. A fundamental core component of the programmatic structure that participants referred to again and again was how instrumental the MontTELLs grant project was in building them up as teachers and introducing them to new ideas and skills. Participants made gains in developing new competencies from the coursework, the one-on-one sessions with an instructional coach, and the numerous formal and informal gatherings of the MontTELLs community.

- The third most powerful thing is she connected the advice, with suggestible practical tools, it's not just you should do more of this it's you should do more of this and here is agreat tool to help you do more of this or here is a way to not do what I just watched you do, and that's good because it's one thing to be told, do more or less of something it's another to be told like here's something that will help you do more or less of something absolutely wonderful
- It was a really strong community. The community aspect of it has been one of the most rewarding pieces for me. I didn't do my undergrad work in Montana, but I did find that working with teachers from across the state. I feel comfortable that if I had a question orif I needed some advice from someone that I could, and they work and say browning or they work, you know, somewhere over an eastern Montana, that community aspect of it was not something I'd experienced here in Montana, and I really enjoyed that piece of it.

MontTELLs Transformational Professional Development

These synergistic and relational learning opportunities were referred to by participants as transformational. It wasn't any one element but how these components worked in sync to scaffold the content which made the training attainable to participants. Teachers also spoke about gaining critical access to new insights about themselves, IEFA and ESL foundational knowledge. Teachers spoke about seeing improvements in their instructional strategies and fundamental understanding with the support of a coach in learning ways to develop ELLs, academic literacy, and language acquisition. Instructional coaches offered timely feedback about their progress, raised applicable critiques, and made relevant suggestions. MontTELLs participants came away from Program II with a deeper knowledge about CLDE and practice at implementing this skill set. It appeared as if teachers viewed the program as transformative to their teaching, and 100% of the participants interviewed, whatever their backgrounds, were highly committed to improving education for ELLs in Montana and beyond.

• Work with future teachers and ELLs, this is this is really critical work, because it speaks to cultural diversity, which is a hot button topic that's something we have to do we cannothold off due to a political climate. And people want practical and useful

tools in which toengage with this work. And I think I would ask that I'd say to Montana tell them that you can say the word sell the program, but sell teachers on

being invest in this by saying, Here are your toolbox.

- I really enjoyed the MontTELLs program, I feel that it helped me grow as a teacher, so that, you know, just as working with students who generally struggle and then pulling in the whole language acquisition piece to it is a whole different ballpark that a lot of teachers don't really understand or don't have a lot of knowledge for, and the LDL students that I work with are some of my. The most rewarding, you know, like it's very rewarding for them to improve but also for them to have a teacher that understands whattheir challenges are, I think, is really helped with a lot of relationships, and that's alwaysthe best part of teaching.
- I thought the program was really helpful. I think it's needed in the state of Montana because we do have a large ELL population, even if we don't think we do people, and thisis what I learned is that people are ELL that even that are English speakers, and so I always just in my brain thought I ELL means that English is not their first language, they're coming to us. So it's needed, it's filling a gap. It would be wonderful if we could take the next step and get that endorsement on your teacher licensure. But I'm thankful for the program and it's it's a baby step but it's a huge step at the same time for our state.AI/AN Participants

Intangible benefits of recognizing and validating ELLs

"I am an English Language Learner"

One third of the participants in Program II were AI/AN and then half of them self-identified as ELLs. It appeared to impact AI/AN participants on a deep level and helped them understand their academic journey as ELLs with compassion which in turn affected their relationships with their students and teaching. Participants shared:

- *I am an ELL. I wish I knew that when I was growing up and got the support I nowprovide my students.*
- Crows are ELLs. We Crows kept our language; the language is in our blood. Even if theyoung kids can't speak it; they start using Crow in the Head Start program and even if they don't use it, at home, they are learning it. We say they start school 70% Crow/30%American English and at the end of school it is 30% Crow and 70% American English. Iam proud to use both languages in my teaching.

Section IV Broader Impacts

The MontTELLs five-year program provided professional development to secondary and middle school teachers in schools on or near reservations with the highest numbers of American Indians and other ELLs. The MontTELLs Principal Investigator, Dr. Jioanna Carjuzaa, and key members of the team were highly successful in their efforts to design and carry out a rigorous, culturally attuned, and advocacy-oriented professional development program and research project. Other factors that added to MontTELLs success in meeting project objectives were the intangible benefits participants spoke about.

• Focusing on academic English literacy skills supports Native Language preservation and revitalization. Learning and having a strong understanding of one language can help youin all your learning as well as when learning another language. It will give my students a better understanding of language and help them in learning their heritage language. If the background skills are there – it will help them.

Instructional Technology Gains and Effective Distance Learning

In Year 5, the MontTELLs team developed a process to overcome the challenges caused by COVID 19 through the innovative use of technology. MontTELLs instructors modeled best practices of online teaching/learning for teachers in Cohort 3 who were completing coursework for the CLDE certificate. These teachers had to transition teaching their own students online with no prior training nor did they have the support in doing so once the transition to online learning happened in 2020.

Lessons Learned and Challenges Met

Through innovative and hands-on experience, it became possible for the MontTELLs team to carry out a participatory action research project and collect and share data. This outcome is especially exemplary given the everchanging challenges caused by the COVID-19 pandemic. In Year 4 of the grant, in anticipation of COVID 19 continuing into the fall and winter seasons. The MontTELLs team worked with schools to determine if it was possible for instructional coachesto join classrooms virtually. The MontTELLs inaugural conference originally planned for Mayof 2020 was rescheduled twice and then finally delivered as a virtual conference in 2021.

Academic Merit and Scholarly Contributions

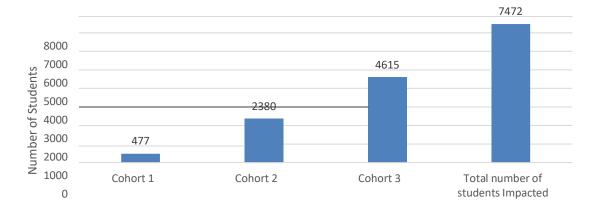
The MontTELLs longitudinal comparative research study addresses the great needs for all regular classroom teachers to meet the needs of ELLs in general and in Montana to meet the needs of our AI/AN ELLs. The MontTELLs model developed here in Montana is a sophisticated blended model that is unique in that it braids a culturally responsive pedagogical approach (IEFA), heritage language preservation, and academic literacy instruction (SIOP). This model may benefit other Indigenous ELLs across the United States and worldwide because of its proven success with preparing teachers to meet the needs of culturally and linguistically diverse students. Further, the CBME is the first research center in Montana to build a linguistic and cultural coalition among schools to meet the needs of ELLs in the state. Hundreds of secondary classroom teachers of consortium member school districts and others in Montana were invited to participate in the MontTELLs grant project for professional development, graduate coursework, mentoring/coaching, and opportunities to nurture community engagement. Before the CLDE

certificate program was offered and when the Office of English Language and Acquisition proposal was written, the only statewide course offered for K-12 teachers to learn about English Language Learners and teaching strategies to meet their needs in Montana was the OPI five-week online course was offered to Program I participants for the MontTELLs grant project.

Program Effectiveness

Overall, MontTELLs was highly effective and widely regarded as an exemplary professional development program for the state of Montana and beyond in a myriad of ways. First, the proof of its success is in the quality of teachers who earned the CLDE and have made impacts with their students. Given the remarks of one of several school leaders, which is typical of many such comments, it indicates the MontTELLs project is making substantial impact across K-12 school and higher education communities.

The long term and sustainable impact as a direct result of the MontTELLs grant project is Montana now has a strong cadre of teachers (N=48) well prepared to teach ELLs in school districts with high AI populations. Figure 1 indicates MontTELLs has already impacted a vast number of students and will continue to grow exponentially as the teachers who completed the CLDE certificate continue to integrate IEFA and SIOP in a culturally responsive manner. MontTELLs exceeded their target goal to prepare 40 teachers by eight, and actually prepared 48 teachers who completed the CLDE certificate program, and 100% percent of the 48 Program II completers rated the program as effective in preparing them to serve ELLs and has increased their knowledge/skills for effective family and community engagement on the exit survey. The data audit validated these findings through various data sources, i.e., the student and school leader interviews and the Courage to Teach (COTs) participant surveys.



Number of Students Taught by Program II Participants 1 Year Later

Figure 4. Number of Students Taught by Program II Participants 1 Year Later

Project Outcomes

Program I

Program I activities consisted of a five-week online course addressing language acquisition theories and instructional strategies for teaching ELLs followed by optional, informal mentoring. Evaluation results from the OPI Program indicated the need for a more robust and relational intervention for K-12 regular classroom teachers in Montana. Several aspects of Program I were problematic. First, there was a lack of interest, and the recruitment of participants to engage in the program Was underwhelming. There was a much higher attrition rate of participants from Program I than Program II, for those teaches who did elect to participate (N = 15).

Program II

Program II consisted of 12 credits of graduate study coursework towards a Culturally and Linguistically Diverse Education (CLDE) graduate certificate spread over two summers with one-on-one coaching sandwiched in between during the academic years. Activities included one-on-one mentoring with an instructional coach. In line with other research, relational aspects are critical to program success in Indian country, mainly when it involves education and training of teachers.

The project outcomes and impacts of the MontTELLs grant project for participants were determined by analyzing the quantitative data and qualitative data in light of the critical program elements such as the development of four courses for the CDLE and how those integrated IEFA the course learning outcomes and impact on participants learning is reflected in the one-on-one SIOP observations and CLASS scores of participants. Data revealed that Program II had a more significant impact on teacher performance and professional advancement in and outside of education.

The MontTELLs grant project met all the project outcomes as well as exceeded some of its expectations. Results from the data analysis indicate that the benefits of participating in Program I for teacher participants did not meet the recruitment expectations which led to lower numbers of teachers who participated in Program I. Modifications were made because the initial method and process measures proposed no longer aligned with the goals of the MontTELLs grant project, such as 30 teachers recruited. In addition, the definition for completers was revised.

Section V Conclusion and Recommendations

The two key findings that have shaped the following recommendations are:

- 1. MontTELLs grant project increased the visibility and raised needed awareness about theurgent needs of ELLs in Montana resulting in unexpected and intangible benefits for people which have come to the surface from the project's acknowledgment, recognition, and empowerment of ELLs in Montana.
- 2. MontTELLs serves as an exemplary national model of practice for professional development (PD) curricula in ELL.

Based on these findings of the MontTELLs grant project's evaluation, the following recommendations are suggested for future research.

- Future quantitative research projects can continue to use the MontTELLs data repository as the SIOP and CLASS dataset provide a multitude of opportunities to investigate important research questions in the area of English Language Learners. This research will contribute new knowledge and understanding of the strength and directional relationship among the study variables, and the PI can continue to work with a qualified individual to develop an accessible central repository system to house the data for future analyses and publication of the results.
- A follow up study is warranted. As the findings from the project and the evaluation efforts have produced rich and unexpected outcomes and demonstrated impact on the participants teaching. More efforts to interview completers and non-completers from Programs I and II would be more useful and richer than the outcome measure of the Praxis scores.
- The qualitative data of the MontTELLs model of Professional Development is robust and assembling a trustworthy collaborative mixed methods research team to continue the research is essential, especially as this body of work and the CBME projects continue to evolve.

Future Challenges

The CBME provides a physical and intellectual space for the development and study of innovative professional development of educators. We recommend that the CBME continue to serveas a resource and lead by keeping the door open for those participants who completed and want to continue their education and for those who stopped out of the program as they may wish to return to finish the coursework or participate in other future CBME events and opportunities. Wealso urge and have confidence that the CBME will continue to foster the relationships that were developed among the teacher participants and their instructional coaches and the school leaders. MontTELLs emphasis on the Family Education Model can continue to live by sharing CBME opportunities and events. As this work continues to grow, the urgency of supporting these efforts best summarized by the PI in the MontTELLs Braiding

• ... fifty+ people that we have now with a strong background in what it means to work with English Language Learners. We have still, this incredible misunderstanding; so, I'm, I'm working hard to change policy in the state. We need an ESL endorsement and if we don't need an ESL endorsement, I want to make sure that every teacher in this state has the CLDE certificate. That's the most basic information that every teacher should have.

Dr. Jioanna Carjuzaa

References

- Austin, R. (2017). Diné Sovereignty, A Legal and Traditional Analysis. Navajo Sovereignty. Lloyd L. Lee, ed. University of Arizona Press: Tucson.
- Clewell, B. & Fortenberry, N. (Eds.). (2009). Framework for Evaluating Impacts of BroadeningParticipation Projects. National Science Foundation (NSF). Retrieved from: <u>http://www.nsf.gov/od/broadeningparticipation/framework-evaluating-impactsbroadening-participation-projects 1101.pdf</u>
- King, J.A., Lawrenz, F. (Eds.). (2011). Multisite Evaluation Practice: Lessons and Reflections From Four Cases. New Directions or Evaluation, (Vol. 129) San Francisco: Jossey-Bass.
- Kukutai, T. & Taylor, J. (2016). Indigenous Data Sovereignty: Toward an Agenda. Australian National University Press.
- LaFrance, J. & Nichols, R. (2009). Indigenous evaluation framework: Telling our story in our place and time. American Indian Higher Education Consortium (AIHEC). http://indigeval.aihec.org/Pages/ Documents.aspx.
- LaFrance, J. (2004). Culturally Competent Evaluation in Indian Country. In M. Thompson-Robinson, Hopson, R., and Sengupta, S. In *In search of cultural competence in evaluation. New Directions for Evaluation*, (Vol. 102, pp. 39-50) San Francisco: Jossey-Bass.
- Mertons, D.M. & Hopson, R.K. (2006). Advancing Evaluation of STEM Efforts Through Attention to Diversity and Culture. In D. Huffman & F. Lawrenz (Eds.) Critical issues inSTEM evaluation. New Directions for Evaluation, (Vol. 109, pp. 35-51). San Francisco: Jossey-Bass.
- National Science Foundation (NSF). (2010). *The 2010 User-Friendly Handbook for ProjectEvaluation*. Retrieved from: <u>http://www.evalu-ate.org/wp-</u> <u>content/uploads/formidable/Doc 2010 NSFHandbook.pdf</u>
- National Congress of American Indians (NCAI) Policy Research Center and Montana State University Center for Native Health Partnerships (CNHP) (2012). 'Walk Softly and Listen Carefully': Building Research relationships with tribal communities. Washington, DC, and Bozeman, MT.
- Petillo, A. (2015). By Force or By Choice: Exploring Contemporary Targeted Trafficking of Native Peoples [unpublished doctoral dissertation]. University of Arizona, Tucson, AZ.
- Rainie, S., Rodriguez-Lonebear, D., & Martinez, A. (2017). Policy Brief: Indigenous Data Sovereignty in the United States. Native Nations Institute, University of Arizona.
- Rodriguez-Lonebear, D. & Rainie, SC (2016). US Indigenous Data Sovereignty Network: About Us. <u>https://usindigenousdata.arizona.edu/about-us</u>
- Rosette LLP, American Indian Economic Development Program [Producer] (February 4, 2021). Wiring the Rez: Innovative Strategies for Business Development Via E-Commerce CLE Conference [webinar]. Arizona State University.
- Tuhiwai Smith, L. (1999). Decolonizing Methodologies: Research and Indigenous Peoples. Zed Books, Ltd.: London.
- Walter, M., Kukutai, T., Carroll, S.R., & Rodriguez-Lonebear, D. (2020). Indigenous Data Sovereignty and Policy