

Addressing Rural Recruitment and Retention in Montana: Project Narrative

Introduction and Absolute Priorities Addressed

Montana State University (MSU) submits this Teacher Quality Partnership proposal under the **absolute priority** *Partnership Grants for the Establishment of Effective Teaching Residency Programs*. This multi-layered program includes: 1) high quality cohort-based, residency-based teacher preparation for initial licensure at the graduate level; 2) a strong induction and mentorship program for participants in the first two years of their teaching positions; and 3) effective professional development about best practices in teacher recruitment and retention for school leaders and boards.

MSU's Department of Education, along with disciplinary departments across the university, works diligently to prepare individuals to be high quality teachers in all Montana schools. The teacher shortage across Montana is particularly acute in the state's most rural and frontier (Cromartie, Nulph, Hart, & Dobis, 2013) districts. MSU's partnership with Shelby Public Schools, just 35 miles south of the Canadian border, resulted in a segment on [HBO's VICE News](#), where superintendent Elliott Crump described the lengths that he has had to go in order to fully staff his school. He states, "If I've heard of it, I've tried it."

This teacher shortage comes at an incredible cost, not only to Montana's children and families, but also to the state's economy. Discussion about Montana's teacher shortage has reached a fever pitch, and this proposed program is part of the solution. In this proposal, we have partnered with nearly every state organization that has a mission to improve education. We believe that it is only by working together that we can address this crisis.

As Montana's land grant institution, we have responded to this need by creating a new degree program, the Master of Arts in Teaching (MAT). The MAT program recognizes that

much of the strength in our rural communities resides in the people who already call that community ‘home.’ This degree is intended for individuals who hold a bachelor’s degree but have not completed the pedagogical coursework necessary for recommendation for initial teaching licensure. Our one-year degree program (summer, fall, and spring semesters) allows people to remain in their home communities while completing their teacher preparation coursework at a distance. In May 2019, we launched the degree program with our first cohort of ten Teacher Residents (TR) pursuing initial licensure in secondary science, mathematics, social studies, and English.

We propose a **multi-layered program based on Hoy & Miskel’s integrated systems model** (2013, see Appendix F) which will provide 1) **living wage stipend support** for TRs leading to recommendation for initial licensure through the rigorous and innovative cohort-based MAT program, 2) support within the schools, through a wide variety of organizations with programs offered statewide, direct mentoring and supported learning communities to achieve **effective induction and mentoring support** for TR-Inductees in their first two years of teaching, and 3) **professional development for school leaders** (principals and superintendents) **and school board members** in best practices in the recruitment and retention of high quality teachers.

Difficulties with rural/remote teacher recruitment and retention are the result of many factors both within and outside of schools, such as the quality of new teacher support and empowerment, school climate, strong school and district leadership, state and local policy development, teacher pay, and quality of life, among other factors. While this proposal cannot address teacher pay or quality of life, the multi-layered program addresses teacher recruitment and retention not only by preparing high quality teachers within their communities (addressing a

quality of life component) and providing induction and mentoring support in the first two years of teaching (advancing human capital), but by also providing professional development on best practices for teacher recruitment and retention to the decision-makers--school leaders and trustees--who have significant influence over teacher recruitment and retention in their communities (addressing board policy, bureaucratic expectations and the school's cultural and political system). This integrated program partners MSU with nearly every major Montana nonprofit organization with a mission to improve K-12 education.

Needs Assessment

With a population density ranking 48th out of 50 states, Montana is a place of remoteness, boasting three of the most geographically isolated communities in the nation. Along with mountain ranges, extreme wind and weather conditions create natural barriers between communities leading Montana to be more accurately described as frontier, than rural (National Center for Frontier Communities, 2014). Montana has the highest percentage of rural/frontier schools of any other state in the US (Showalter, Klein, Johnson, & Hartman, 2017).

Within this backdrop, teacher recruitment is an increasingly alarming challenge. Nationally, the percentage of college students who major in education has declined substantially, from 21% in 1970 to less than 5% in 2015 (US Department of Education, 2017). In Montana, the number of completers of teacher education programs has decreased from 788 in 2010-11 to 664 in 2016-17 according to the Title II report (US Department of Education, n.d.). Articles in the Billings (MT) Gazette from Fall 2016 to the present have painted the picture of eager students waiting in some of the state's most rural classrooms, uncertain if a teacher will arrive. One article shares how 7th and 8th grade students from Vida, Montana were bussed 30 miles away because of the lack of teachers in their home district (Hoffman, 2016a). Malta superintendent, Kris

Kuehn, identifies hiring teachers amid the shortage as "the single largest obstacle for rural schools" (Hoffman, 2016b), adding, "Whatever tool we can have in our toolbox to put quality teachers in front of students is the goal" (Hoffman, 2019). The challenges faced by school administrators in Montana's rural schools come into sharp relief when examining the 683 vacancies listed in the "[Critical Quality Educator Shortage](#)" report issued by the Montana Office of Public Instruction (OPI) in November 2017. Noted in this report are the non-elementary teaching areas with the greatest vacancies, including Mathematics (71), Science (45), English (85), and Social Studies (55).

Recruitment into the teaching profession in Montana is not aided by the fact the state ranks lowest (50th) in starting teacher pay according to 2017-2018 data obtained by the National Education Association (n.d.), with the average starting pay in rural areas even lower than the state average (Seifert, Harmon, and Downey, 2018). Any savings obtained through lower salaries may be short-lived, however, given the cost of teacher turnover. The Learning Policy Institute (2017) estimates the cost of replacing a teacher at \$20,000 in urban districts. This is consistent with the cost in Alaska (DeFeo et al., 2017), a state like Montana with high turnover rates in rural districts due to remoteness and distance from amenities. Recently, REL Northwest partnered with MSU's [Center for Research on Rural Education](#) (CRRE, 2019) to survey Montana teachers about issues related to recruitment, job satisfaction, and retention and found more than 20 percent of less experienced teachers and those working in rural remote and rural distant/fringe areas reported looking for other work in the coming year. Of greatest concern is the nearly 40 percent of new teachers in the rural/frontier districts who are looking for other jobs.

In an effort to understand the challenge of recruitment and retention in rural Montana's school districts, the Montana Office of the Commission of Higher Education (OCHE) convened

the [Rural Education Task Force](#) to study this issue and make substantive recommendations. Matt Hoffman (December 9, 2016), writing for the Billings Gazette, commented that solutions to address this challenge resemble bricks in a wall: “each of them help, but none fixes things on their own.” Some solutions include: higher salaries for beginning teachers, bonus pay for beginning teachers who teach in high-needs schools and stay for three years, student loan forgiveness, school-owned housing, scholarships for preservice teachers to student teach in rural schools, and high quality induction for new teachers and administrators. In spring 2019 the Montana Legislature reinstated Montana’s Quality Educator Loan Assistance Program aimed at keeping young teachers in small-town jobs with student debt support (Bozeman Daily Chronicle, May 14, p.A3). Furthermore, Sen. Jon Tester (MT) introduced to Congress the [Rural Educator Support and Training \(REST\) Act](#) to assist those called to teach in rural areas of the US with financial support by way of scholarships, loan forgiveness, and professional development.

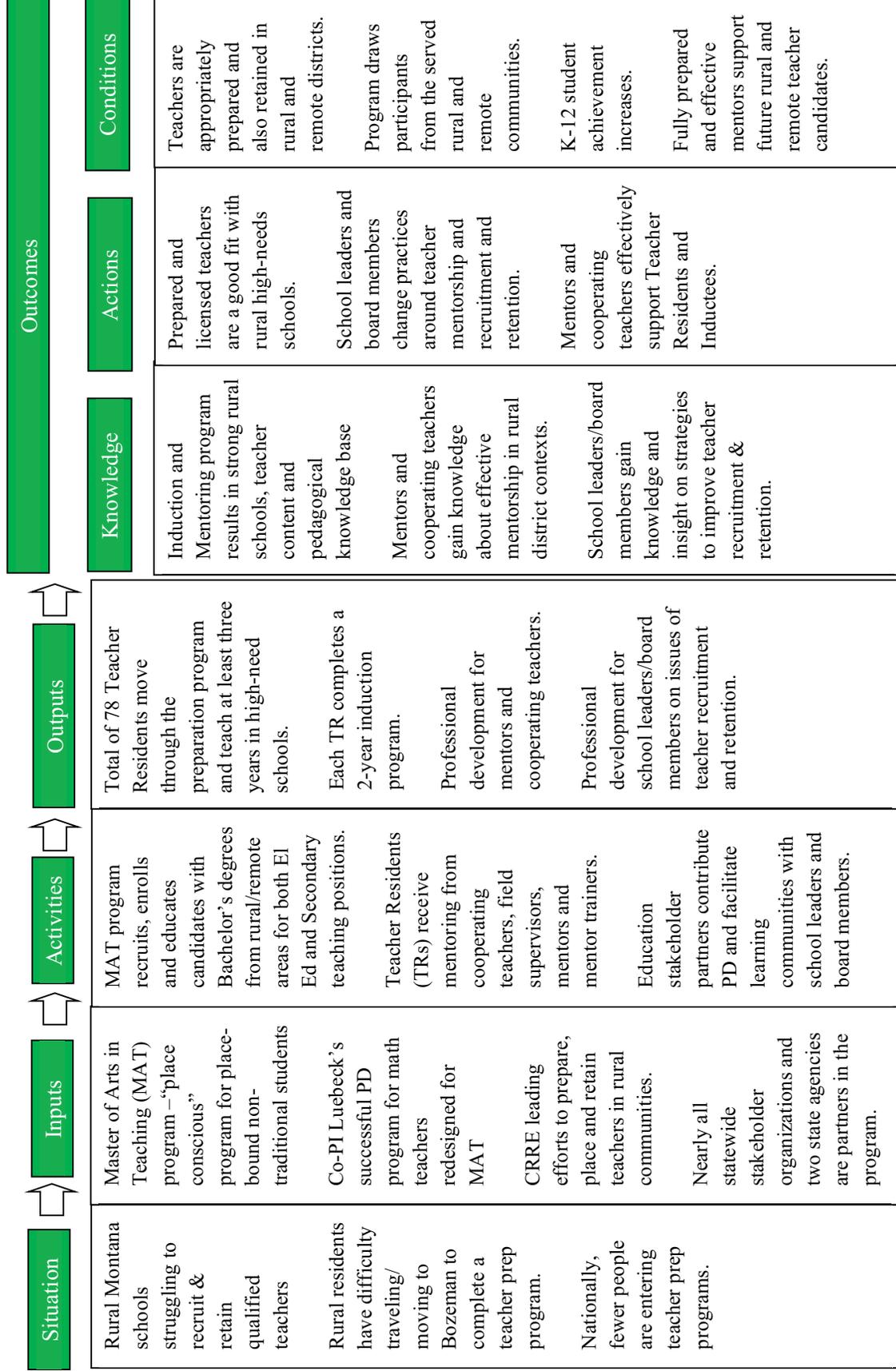
Teacher recruitment to and retention in these small, isolated communities is exacerbated further by poverty. There are 320 public school LEAs in Montana, of which 94% meet a poverty threshold of 20% or higher (according to NSLP data from fall 2018). Among those LEAs, 42% have schools that are in the high poverty range (60% elementary, 45% non-elementary). These data demonstrate that in every corner and in nearly every community of Montana, the need for highly qualified teachers exists. Yet, bringing in new teachers unfamiliar with life in a rural/frontier community and often to schools with high rates of poverty is a challenge.

Legislation aside, one solution to this challenge is to recruit, prepare, hire, and retain high-quality teachers from within the existing community structure. Individuals already residing in rural communities, or wishing to return to their home towns, need access to the training and education required to become a licensed teacher. In response to this call, Montana State

University has partnered with the state's Office of Public Instruction as the consortial entity to identify and verify the eligibility of any LEA within the state who meets the high-need threshold of rurality and/or poverty and has within its jurisdiction a school that meet the TQP eligibility criteria. Only through this coordinated statewide consortium of LEAs will the need of preparing highly qualified teachers for every classroom in Montana be addressed.

MSU has developed and recently launched a Master of Arts in Teaching (MAT) degree program which leads to recommendation for initial licensure in K-8 Elementary Education as well as secondary (5-12) in the identified needed content areas of: Math, Science, English/Language Arts, and Social Studies. The MAT degree developed and initiated by Montana State University is a grow-your-own solution which provides an opportunity for prospective students, who live in the small towns struggling to attract new teachers to their communities and who have a bachelor's degree in an area other than education, to pursue the teaching profession. The direct need to allow these potential teachers to study in their home communities full-time while supported financially through their teaching residency is key to the success of this initiative. Without financial support, the financial investment for individuals living in small, isolated rural communities, many of which struggle with very high poverty rates, is simply a very large barrier.

Logic Model—Addressing Rural Recruitment and Retention in Montana



Description of Multi-Layered Program

The three elements of our multi-layered program are described in depth in this section.

Program Element One: *High quality cohort-based, residency-based teacher preparation for initial licensure at the graduate level.* Recognizing the value of a student's previous college degree, the MAT coursework focuses on curricular design and pedagogy, field experience/practice, and meets the learning needs of all students, most of whom we expect to be place-bound in communities across Montana. Teacher Residents (TRs) will work closely with program faculty and cooperating teacher-mentors to develop the hands-on pedagogical skills needed to be successful teachers using standards-based best-practice techniques. MAT coursework is delivered primarily online, with TRs coming to the MSU campus for a one-week field experience with youth during the initial summer semester, followed by the teaching residency in the individual's home or nearby community over the course of the fall and spring semesters. This blended format, with the majority of the coursework delivered online initiated with an intensive one-week on-campus face-to-face experience, has been shown empirically to yield positive learning outcomes (Mayhew, Rockenbach, Bowman, Seifert, & Wolniak, 2016). This program was vetted through the many levels of university governance (departmental faculty, college level administration, graduate school advisory council, full faculty senate, provost) as well as our university system governing body—the Montana Board of Regents (BOR)—with a unanimous vote of support. The Montana Board of Public Education also voted unanimously to approve the MAT program for initial licensure. The [program has been lauded](#) by the various stakeholder groups around the state as an important part of the solution to the teacher recruitment and retention crisis in rural Montana. This program launched its first cohort of

students on May 13, 2019. MAT graduates will be prepared to live, work and commit to teach in Montana's rural/frontier communities.

Teacher Residency (MAT). TRs will engage in full-time, online study that includes coursework and integrated hands-on classroom experience in a cohort format. The first secondary (5-12) cohort began in May 2019 and the first elementary (K-8) cohort will begin in March 2020. Coursework is taken in a prescribed sequence, and each course serves as the foundation for the next. By virtue of the course sequence, each cohort has the opportunity to learn with and from each other throughout the entire program. TRs enroll in twelve credits per semester to complete the MAT degree requirements and earn recommendation for a Montana Class 2 Teaching License in approximately one year (elementary 15 months, secondary 12 months). Participants will engage with school-age children in field experiences during each semester of the program, including both a summer camp and in-classroom teaching experiences. The coursework (presented in the tables below) was developed by a committee of tenured faculty from both education and arts and sciences, bringing together the best practices of education in fields such as mathematics education and science education to create a robust curriculum. Recognizing the importance of childrens' early foundation in mathematics/computational thinking and emergent literacy, elementary education TRs complete additional coursework in the area of elementary math preparation and early literacy, and will also work with faculty mentors from MSU's Department of Mathematical Sciences and with science and literacy teaching faculty in the Department of Education through the duration of the program..

TRs will train in school classrooms plus complete full-time graduate level coursework during the entirety of the school year. Since new teachers in rural Montana are the lowest paid in the country, there is little hope for ROI in terms of the cost of the MAT program vs. long-term

and interest-bearing student loan payments coupled with a year's lost wages. The stipend provided by the TQP funds will attract eligible candidates who would otherwise be excluded from participation due to financial hardship.

<u>MAT Elementary (K-8) Curriculum</u>		
Semester	Courses	Credits
Spring	<i>Prerequisite Courses – must be completed successfully to move to Summer coursework</i>	
	EDCI 419: Ratio and Proportion Across K-12	3 cr
	EDCI 561: Early Literacy Acquisition: Encoding and Decoding	3 cr
Summer	EDCI 552: Human Development and the Psychology of Learning	3 cr
	EDCI 563: Language Acquisition and Assessment	3 cr
	EDCI 553: Diversity, Special Needs, and Classroom Management	3 cr
	EDCI 538: Methods of Teaching: K-8 Arts and Health Enhancement through Inquiry Camp	3 cr
	EDCI 543: Introduction to Curriculum Design and Assessment	1 cr
Fall	EDCI 565: Methods of Teaching: K-8 Mathematics	2 cr
	EDCI 566: Methods of Teaching: K-8 Science	2 cr
	EDCI 567: Methods of Teaching: K-8 Language Arts	2 cr
	EDCI 568: Methods of Teaching: K-8 Social Studies	2 cr
	EDCI 555: Technology, Instructional Design, and Learner Success	2 cr
	EDCI 598: Practicum (In-School Experience Hours)	1 cr
Spring	EDCI 595: Student Teaching	6 cr
	EDCI 519: Addressing Equity in Linguistic and Cultural Diversity	3 cr
	EDCI 569: Reflective Inquiry in Rural Education	3 cr
	Program Total Credits	36

<u>MAT Secondary (5-12) Curriculum: Math, Science, Social Studies, English</u>		
Semester	Courses	Credits
Summer	EDCI 552: Human Development and the Psychology of Learning	3 cr
	EDCI 521: Content Literacy	3 cr
	EDCI 553: Diversity, Special Needs, and Classroom Management	3 cr
	EDCI 538: Summer Youth Inquiry Camp	3 cr
	EDCI 543: Introduction to Curriculum Design	1 cr
Fall	EDCI 554: Methods 1: Curriculum Design, Pedagogy and Assessment (In-School Experience Hours)	3 cr
	EDCI 555: Technology, Instructional Design, and Learner Success	2 cr
	EDCI 558: Methods 2: Methods of Teaching (In-School Experience Hours)	3 cr
	EDCI 556: The Legal, Social, and Practical Basis of Schooling	3 cr
Spring	EDCI 598: Student Teaching	6 cr
	EDCI 519: Addressing Equity in Linguistic and Cultural Diversity	3 cr
	EDCI 569: Reflective Inquiry in Rural Education	3 cr
	Program Total Credits	36

Description of Alignment with Educator Preparation and Student Achievement

Standards. In accordance with **general program requirement f(5)ii**, the following two tables illustrate the alignment with educator preparation and student achievement standards. In the first table, both national and state standards are included because our initial teacher licensure programs are both nationally (CAEP) and state accredited, which requires alignment with both sets of standards. The second table illustrates the alignment between Montana K-12 content standards and the Teacher Residency program elements. Schools must provide evidence of student proficiency in the K-12 content standards to meet state accreditation and ESSA reporting requirements.

<u>InTASC Standard</u>	<u>Montana PEPPS Standard</u> <u>10.58.501</u>	ALIGNMENT WITH Teacher Residency
#1: Learner Development	Demonstrate understanding of how learners grow and develop...	EDCI 552 EDCI 553 EDCI 538
#2: Learning Differences	Use understanding of individual differences and diverse cultures and communities...to ensure inclusive environments...	EDCI 519 EDCI 538 EDCI 543 EDCI 553 EDCI 554 EDCI 556 EDCI 558 EDCI 565-568
#3: Learning Environment	Work with others to create environments that support individual and collaborative learning...	EDCI 538 EDCI 553 EDCI 554 EDCI 558 EDCI 565-568 EDCI 595
#4: Content Knowledge	Standards for endorsement 10.58.502-10.58.533	Praxis Exam for admission EDCI 521 EDCI 554 EDCI 558 EDCI 565-568
#5: Application of Content	N/A	EDCI 521 EDCI 543 EDCI 554 EDCI 558 EDCI 565 EDCI 566-568 EDCI 595
#6: Assessment	Use multiple methods of assessment...to guide the teacher's and learner's decision making...	EDCI 521 EDCI 554 EDCI 558 EDCI 555 EDCI 565-568 EDCI 595

#7: Planning for Instruction	Demonstrate understanding of how to connect concepts and use differing perspectives to engage learners...	EDCI 543 EDCI 554 EDCI 558 EDCI 565-569 EDCI 595
#8: Instructional Strategies	N/A	EDCI 543-555 EDCI 558 EDCI 565-568 EDCI 595
#9: Professional Learning and Ethical Practice	N/A	EDCI 554 EDCI 556 EDCI 558 EDCI 569 EDCI 595 EDCI 598
#10: Leadership and Collaboration	Interact knowledgeably and professionally with students, families, and colleagues based on social needs and institutional roles...	EDCI 538 EDCI 553 EDCI 554 EDCI 558 EDCI 569 EDCI 595 EDCI 598
N/A	Engage in leadership or collaborative roles, or both, in content-based professional learning communities and organizations and continue to develop as professional educators...	EDCI 556 EDCI 595
N/A	Engage in ongoing professional learning and use evidence to continually evaluate candidate's practice...	EDCI 538 EDCI 554 EDCI 558 EDCI 569 EDCI 595 EDCI 598
N/A	Abide by the Montana Code of Ethics for Professional Educators	EDCI 538 EDCI 595

<u>Montana K-12 Content Standards</u>	ALIGNMENT WITH Teacher Residency
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<u>K-12 Indian Education for All</u>	<u>Foundational information:</u> EDCI 519 EDCI 569 <u>Implementation:</u> All coursework and field experiences
<u>K-12 English/Language Arts</u>	Praxis Exam Prior degree EDCI 521 EDCI 554 EDCI 558 EDCI 595
<u>K-12 Mathematics</u>	Praxis Exam Prior degree EDCI 521 EDCI 554 EDCI 558 EDCI 595
<u>K-12 Science</u>	Praxis Exam Prior degree EDCI 521 EDCI 554 EDCI 558 EDCI 595
<u>K-12 Social Studies</u>	Praxis Exam Prior degree EDCI 521 EDCI 554 EDCI 558 EDCI 595
<u>K-12 Digital Literacy and Computer Science Guidelines</u>	EDCI 555

Recruitment from High-Needs LEAs. Through our Memorandum of Understanding, Montana Office of Public Instruction created a consortium of high-need LEAs for the program.

OPI will work with MSU to certify annually a list of partner LEAs and schools that meet the TQP criteria for residency and induction. Through this consortium, program staff and faculty will work with eligible LEAs to recruit, select and eventually hire new MAT graduates as teachers. The MAT program personnel, in addition to our state partners, will work with local LEA high-need consortium schools to identify local individuals interested in teaching, current paraprofessionals, or other school staff who meet the admission criteria and the needs of the program and schools. State partners also will play an important role in communicating the opportunity to people in eligible communities and encouraging their application. Ms. Angela McLean is the Montana Office of the Commissioner of Higher Education's (OCHE) American Indian/Minority Achievement and K-12 Partnerships Specialist and also the chair of the OCHE Rural Education Task Force. Her statewide work is critical in building and sustaining relationships with qualifying LEAs, in addition to the recruitment of MAT applicants. Ms. McLean is a former high school social studies teacher and Montana University System Regent. Additionally, she served as the 31st Montana Lieutenant Governor from 2014-2016. A product of the Twin Bridges, Montana (pop. 400) schools, she taught in rural Anaconda, Montana for over twenty years.

Selection of Teacher Residents. Per **absolute priority IIa6(i)**, we developed admissions criteria that are aligned with the hiring objectives of eligible LEAs in the consortium, which are established by the Montana Board of Public Education (BPE) through [K-12 school accreditation](#). As our state has identified the critical teacher shortage in the following areas, the MAT program prepares teachers for K-8 elementary education and 5-12 secondary education with endorsements in English/Language Arts, Math, Science, and Social Studies. Applicants must meet the following admission requirements: Minimum GPA of 3.0 or higher for both bachelor's degree,

and all graduate level coursework; writing sample/personal statement; recommendation letters; and commitment to service in a rural community. In order to graduate and be recommended for initial licensure, TRs must demonstrate mastery of content area knowledge through a passing Praxis exam score and have their endorsement verification reviewed by MSU tenure/tenure-track faculty content expert. Under this grant, the MAT program seeks to enroll 9 elementary and 9 secondary Teacher Residents in the first year (including the cohort that has already begun), rising to 15 each for years 2 and 3. Those who participate in the program (receive living wage stipend and induction and mentoring) will sign a contract indicating that they commit to teaching in a high-needs school in an eligible LEA for three years and participate in the two-year induction and mentoring program post-graduation. This contract will specify stipend payback requirements if the commitment is not fulfilled. TRs will provide a certificate from the eligible LEA chief administrative officer to the Office of Public Instruction demonstrating employment at the beginning and upon completion of each year or partial year of service.

Clinical Experience and Teaching Residency. In the first semester of the MAT (second semester for the elementary cohort) through EDCI 538: Youth Inquiry Camp, TRs will engage in first-hand interaction guided by professional youth mentors, counselors, and program faculty. Many youth who enroll in these camps have challenging backgrounds, and TRs will learn and practice trauma-informed teaching and management strategies (Ko, et al., 2008). Supervised engagement with youth is vital to TRs' success as they will soon enter a year-long teaching residency, where they will be expected to helpfully and healthfully engage with youth from day one. This course orients elementary and secondary TRs to the competencies and skills of engaging youth in classroom community building. The focus of the course is preparation for and participation in a week-long residential program of youth mentorship and enrichment, sponsored

by our partner organizations, Big Sky Youth Empowerment (BYEP) for the secondary cohort and MSU Academic Technology and Outreach (ATO) for the elementary cohort.

Secondary TRs will serve as assistant youth mentors in this community outreach program, based on BYEP's model of intervention with vulnerable youth in the greater Bozeman area. Elementary TRs will practice youth engagement through an enrichment program modeled on the [Peaks and Potentials camp](#) where they will teach creative arts, health enhancement (physical and health education, including STEM content), and literacy under supervision. Led by professional counselors, seasoned camp mentors, and MSU faculty, TRs will study, practice, and reflect on engaging with youth in an educational setting. In addition to graded coursework, TRs will be evaluated in this early field experience using the Danielson Framework (2007) Evaluation Tool developed by OPI and used by many school districts across the state for teacher evaluation. The tool evaluates teacher performance in four domains: planning and preparation, classroom environment, instruction, and professional responsibilities. This tool meets rigorous standards of reliability and validity (Danielson, 2007). In this early field experience, TRs will be evaluated on their performance in the domains of classroom environment and instruction. This gives TRs early familiarization with the expectations of the Danielson Framework, as all classroom field experience performance will be evaluated using the tool that also forms the basis for Montana's Educator Performance Appraisal System. Finally, in support of the cohort model, state partner organization Montana Federation of Public Employees (MFPE) will coordinate a workshop and working dinner at the conclusion of TRs' initial summer field experience. This culminating activity will assist in building the positive interdependence that cohorts need in order to thrive.

The formal teaching residency will begin with the fall semester, with the initial semester focused on the practice of skills and integration of coursework throughout the methods sequence. Each residency placement will be facilitated according to MSU's guidelines and structure. Placements will be verified by our Field Placement and Licensure office (FPLO), including, but not limited to: School is accredited; Cooperating Teacher (CT) has a minimum of three years of teaching experience within the content area in which the student is seeking endorsement; and CT meets a Danielson evaluation as reported to the Montana Office of Public Instruction Educator Performance Appraisal System (EPAS) with a mode score of 3 and no scores of 1. Additionally, all district requirements must be met with the placement. The MSU FPLO will also ensure that the district signs a Memorandum of Understanding, formalizing the placement over the year-long experience. Faculty from the MAT program will meet with the chosen CTs to ensure that the teacher uses teaching methods and practices consistent with MAT expectations and coursework.

The fall 100-hour, 16-week in-school experience is closely coupled with the teaching methods courses and continues in the spring semester with full-time student teaching. The fall in-school experience requires an increasing number of hours in-school per week as the semester progresses which allows the TR to take on a greater level of responsibility for instruction. This experience incorporates the Department of Education's established co-teaching model (FPLO, 2018) between the TRs and their CTs. Each TR is responsible for taking a lead role in the planning and teaching of at least two observed lessons. During this experience, when not teaching the whole class, TRs can work with small groups, assist the CT with instruction, tutor individual students, or perform most tasks typically assigned to a teacher's aide. The TR also will be guided by their methods course content-specific faculty/mentor.

Additionally, a field supervisor from the MSU Department of Education will be assigned to oversee the experience and will serve as a liaison between the classroom and MSU. This will provide the TR with four supporting guides throughout the fall experience (program faculty/mentor, CT, field supervisor, and school administrator). TRs will have a final Danielson Performance assessment in their final week. TRs in the first semester are never left alone with full responsibility for the classroom. If there are circumstances in which the students will be left alone, pre-approval from the assigned field supervisor is required.

A strength of Montana educator professional development is the mandated statewide Pupil Instruction-Related (PIR) days, which are days of teacher activities devoted to improving the quality of instruction. The Montana Federation of Public Employees (MFPE) will provide Teacher Residents with travel scholarships and complimentary registration to the annual statewide Educators' Conference, which occurs during the statewide PIR days on the third Thursday and Friday of October. Not only is this conference an excellent professional development venue, it also allows for significant networking in the educational community as approximately 3,000 of Montana's 10,000 teachers attend each year.

During the final semester of the MAT, each TR undertakes a 14-week full-time student teaching experience in a qualifying placement. This in-school experience is the TR's opportunity to implement what they have studied in their preparation program. During this time TRs are expected to shadow their CT (from the time the CT arrives at school until they leave for the day). This includes staff meetings, Individualized Education Program (IEP) meetings, curriculum committee work, bus duty, and any other meetings the CT has as part of their day. Our expectation is that the TR is at the school and available when the CT is, within a reasonable expectation. TRs and CTs will utilize the co-teaching model, working together to plan, organize,

deliver and assess lessons. Student teaching will take place in the same classroom as the practicum fall semester in-school experience and will meet the same, rigorous requirements. Approximately 70 days, or 560 hours of student teaching are required. This includes instructional days and attendance at professional trainings and meetings.

TRs will complete the following during student teaching in order to demonstrate proficiency:

1. TRs during student teaching will analyze and create competent demonstrations of all professional skills and dispositions required for a Class II initial teaching license valid in the state of Montana within the context of student teaching, as shown by a successful Danielson Final Performance Assessment.
2. TRs will also analyze elements of the Danielson Framework for teaching and create competent demonstrations of these elements within the context of student teaching as shown by a successful Danielson Performance Evaluation.
3. TRs will evaluate their own performance as functioning classroom educators, differentiating for all students' learning needs while building, maintaining a full load of educator responsibility, and demonstrating through evidence effective planning, implementing and assessment.
4. TRs will synthesize their overall experiences in student teaching by reviewing performance evaluations. TRs will use these data to understand their current instructional practice.
5. Based upon their cumulative performance evaluations, TRs will design a professional development plan to modify and improve classroom instruction based on their overall student teaching experience.

A field supervisor from the MSU Department of Education is assigned to oversee the student teaching experience and serve as a liaison between the CT and MSU. The field supervisor conducts meetings with the cooperating teacher and teacher candidate, including an introductory meeting, midterm, and final meeting; completes a minimum of 4 formal observations; and helps to ensure the experience is completed according to all MSU expectations. After a successful mid-term evaluation, the teacher candidate may substitute teach, for pay, for their cooperating teacher for up to five days.

While TRs are engaged in student teaching, they complete two additional graduate courses, EDCI 519: Addressing Equity in Linguistic and Cultural Diversity and EDCI 569: Reflective Inquiry in Rural Education. The former prepares TRs to recognize how linguistic and cultural diversity may influence student learning, particularly among students with limited English proficiency, and introduces Montana's English language learning assessment system (WIDA Access 2.0) and its use as a resource for increasing and empowering linguistically diverse students. The latter course serves as a capstone in which TRs reflect on the question: "How do I envision myself as a rural teacher?" In contemplating this question, TRs consider critically: 1) the elements that compose their identity as a rural teacher; 2) the ways in which this identity will shape their personal and professional roles in the school and community; and 3) a research-based plan of professional practices that will support and sustain them across their career as a rural educator.

Upon successful completion of the Master of Arts in Teaching coursework, teaching residency, and demonstration of content knowledge in accordance with the State of Montana, TRs will earn a graduate degree and recommendation for a Class 2 Montana teaching license in the commensurate endorsement.

Program Element Two: *Provide a strong induction and mentorship program for participants in the first two years of their teaching position.* The teacher induction and mentoring portion of the multi-layered program will serve those who complete the MAT and accept a teaching position in an eligible LEA. These individuals will participate for the first two years of teaching. The program design builds on an existing model of blended professional learning that has effectively served Montana's rural mathematics teachers over five years of implementation through a USDOE Title II-funded Mathematics and Science Partnership, administered by OPI and established by co-PI Jennifer Luebeck. The MSP project, Standards-based Teaching Renewing Educators Across Montana (STREAM) was founded on a theory of action linking research-based elements of effective professional development with the development of a statewide, systemic, and sustainable approach to providing professional learning opportunities to Montana's K-12 mathematics teachers, particularly those in remote and rural schools.

The STREAM blended professional learning (PL) model delivers a curriculum that employs authentic tasks of teaching, introduces an array of high-quality resources and exemplars, and engages teachers in an active professional learning community across a sequence of online modules and a series of face-to-face PL opportunities provided by Montana partner organizations. The result is continuous professional learning that persistently presses without overwhelming, offers varied experiences, and balances limited down time with reasonable expectations. This blended approach incorporates well-defined elements of effective professional learning in ways that are accessible to rural and isolated schools, creating opportunity for teachers who face obstacles of inadequate time, isolation, great distance, and limited financial resources.

This model is theoretically and empirically based. Our view of teacher professional learning is informed by social-cognitive learning theory that views professional learning as a complex set of social and cognitive processes in which practicing teachers actively engage in a series of collaborative interactions related to content, self, and students (Shulman & Shulman, 2004; Timperley, Wilson, Barrar, & Fung, 2007). We embrace Desimone's "core conceptual framework" (2009, p. 183) for teacher professional learning composed of content focus, active learning, coherence, duration, and collective participation, with the added component of professional reflection (Van Zoest & Stockero, 2008; Wiliam, 2007). Finally, we adopt the construct of a professional learning community (PLC) where "educators work collaboratively in recurring cycles of collective inquiry and action research to achieve better results for the students they serve" (DuFour & Eaker, 2010, p.11) as an organizing structure to guide the process of teacher professional learning in the induction and mentoring program.

We anticipate that this program will improve novice rural/remote teacher effectiveness and may lead to increased teacher retention. A significant body of research clearly identifies teacher professional learning as a critical element in the effort to improve schools and increase student achievement (Desimone, 2009). Experts have called for "professional development programs [to] focus on participants' teaching self-efficacy, especially due to the association of self-efficacy with positive student outcomes and actual classroom practice" (Stevens, Aguirre-Munoz, Harris, Higgins, & Liu, 2013, p.160). We will provide content and processes that are most effective in advancing novice rural teachers' sense of teaching efficacy. We contend that rural schools, students, and teachers have been an "invisible minority" (Rubisch, 1995), and the needs of novice rural teachers have often been overlooked in conversations centered on teacher induction and mentoring. Novice rural teachers' induction into the profession is shaped by

isolation, context, and culture. This program is place-conscious (Gruenewald, 2003). Through the induction and mentoring program, we will meet the practice-related and personal needs of novice rural teachers, which may lead to increased retention.

Assignment of Cohorts. MAT graduates teaching in eligible LEAs will be placed in professional learning cohorts which facilitate collaboration between inductees and their mentor teachers in the receiving school. Cohorts will be established based upon the following:

1. Grade level (K-2, 3-5, 6-8) and/or content area (English, Math, Science, Social Studies)
2. Physical proximity using [Montana Regional Education Service Areas](#), two of which are program partners
3. Year in program (Year One and Year Two). Once the entire induction and mentoring component is built out, Year Two inductees will mentor Year One inductees in their assigned cohort.

Selection of Mentors. A mentor teacher in each inductee's eligible LEA or an eligible LEA in close proximity will be identified and selected. The inductee may be the only grade level or content area teacher in that LEA; therefore it is necessary in many cases to go outside the inductee's LEA to identify a mentor. Mentors will be identified and selected using the following criteria outlined in **absolute priority II(4)i-v** through a Danielson evaluation tool as reported to the Montana Office of Public Instruction Educator Performance Appraisal System (EPAS) with a mode score of 3 and no scores of 1. The Danielson evaluation tool addresses performance in planning and preparation (II(4)i), instruction (II(4)ii), and professional responsibilities (II(4)iii).

Absolute priority II(4)v will be addressed through our partnership with the MSU Department of Mathematical Sciences and the Department of Education's literacy faculty. These content/pedagogical experts will establish clear criteria for selection of mathematics/literacy

mentor teachers. Finally, in alignment with Montana's Constitution which delineates citizens' right to privacy (Article II, Section 10), the Superintendent of Public Instruction has established through policy that direct access to teacher performance cannot be linked to K-12 student achievement data. Therefore, absolute priority II(4)iv will not be used as a criterion.

Cohort-Based Online Component. The induction and mentoring program will adopt Co-PI [REDACTED] established and tested STREAM modular approach to blended professional learning. This online component is cohort-based per the selection criteria outlined previously a platform and forum for ongoing learning and networking among mentors and Inductees across Montana. State partner organization Southwest Montana School Services (SWMSS) will provide the online platform (Moodle) and manage and facilitate the component, under the direction of co-PIs [REDACTED] and [REDACTED]. Online learning modules will examine best practice in curriculum, instruction, and assessment; social and emotional learning (for adults and students); establishing a positive classroom culture and environment; establishing a positive classroom culture and environment; facilitation techniques for working with adult learners; and getting connected with local, state, and national resources. [REDACTED] will provide additional support for elementary and STEM secondary inductees with interdisciplinary mathematics and computational thinking professional learning. The online component leverages individual pacing, facilitation, and timed-release tasks to ensure both flexibility and accountability for teachers. Each module is closely reviewed and revised from a technical, editorial, and pedagogical perspective to ensure consistent quality. Online modules are asynchronous and avoid the use of live video, external tools such as electronic whiteboards, and extensive downloads that tend to use significant internet bandwidth, which rural/remote teachers

in schools (and homes) face. Professional learning through the STREAM modular approach will be available to Inductees and Mentors alike.

Novice teachers invest between 4 and 8 hours completing two or three tasks each week. They may access classroom videos, exemplars and student samples, journal articles, and other high-quality resources on the Web. They communicate solutions and reflections in facilitated online discussion forums, and receive feedback from peers and instructors. Classroom-focused tasks engage novice teachers in designing or teaching lessons, observing and interviewing students during an activity, or analyzing student work.

Consistent due dates and a week-by-week release schedule ensure collective participation in each set of tasks. Mentors monitor engagement in learning activities, synthesize discussion and reflection, and provide feedback to participants based on a set of rubrics that assess overall quality of discussion and reflection and completion of tasks, and proficiency on a culminating assignment. Successful completion of online modules can be applied to continuing education credit for educator license renewal.

Face-to-Face (F2F) and Additional Online Components. State partner organizations will provide F2F and additional online components and these will be organized into a “menu of options” format by content area and/or grade level. Inductees will be required to complete two online and/or F2F components of their choosing from the menu per semester. These existing educator programs, conferences and events are well-attended by novice and veteran educators and provide opportunities for networking in addition to professional learning. Many such events occur during statewide or district release days for professional learning.

1. Western Montana Professional Learning Collaborative (WPLC) will provide access to online courses for all Inductees.

2. OPI's [Teacher Learning Hub](#) will develop and provide induction-related online modules for all Inductees.
3. SWMSS will provide no-cost registration at professional learning workshops and conferences for Inductees in southwest Montana.

MSSA will provide up to 100 no-fee F2F professional learning opportunities across Montana for inductees annually.
4. WPLC will provide no-cost F2F professional learning opportunities for Inductees in western Montana annually.
5. Montana Federation of Public Employees (MFPE) will provide travel scholarships and complimentary registration to the statewide Educators' Conference annually.

Consistency with State/Local Education Reform and Student Achievement Goals.

Montana's Every Student Succeeds Act Consolidated State Plan (2018) states,

The OPI will support LEAs in recruiting, developing, and retaining effective educators by providing and coordinating training, technical assistance, and capacity-building efforts that promote the ongoing professional growth of every Montana educator. The OPI developed a state plan incorporating continuous improvement systems and structures to bring clarity, quality, flexibility, and sustainability to this statewide professional learning plan...The continuous improvement cycle created by the OPI will meet educators where they are, provide ongoing support, and improve the skills of all educators to meet the specific learning needs of every student (p. 60).

The plan outlines two approaches "to ensure that every educator is prepared to teach every student based on specific learning needs: the Montana Continuous Improvement Cycle for Educators, and the Framework for Montana's Tiered System of Support for Educators (p. 60)." In support of Montana's education reform and student achievement goals, the continuous improvement and tiered system approaches will drive the development and organization of both the Induction and Mentoring program and the professional development program for school

leaders and board members. See Appendix F for an excerpt of the ESSA State Plan (pp. 60-64) which outlines these two approaches in detail.

Program Element Three: *Effective professional development about best practices in teacher recruitment and retention to school leaders and boards.* This program element is designed to assist school and district leaders in creating the organizational climate that leads to increased teacher recruitment and retention. As articulated in this proposal’s introduction, addressing the teacher recruitment and retention crisis must happen at the systems level. School leaders and elected school board members are the individuals who can create a school climate and enact policy that addresses recruitment and retention.

State partner organizations School Administrators of Montana (SAM) and the Montana School Boards Association (MTSBA) will design, coordinate, and provide professional learning support to eligible LEA school leaders and board members who host Teacher Residents and employ Inductees as these individuals are instrumental in mentoring new teachers and enacting policy that supports teacher recruitment and retention.

The following table shows the alignment between national Professional Standards for Educational Leaders (PSEL), the Montana school leader standards, and the National School Boards Association (NSBA) framework/beliefs and policies. SAM and MTSBA will use the following alignment as they design professional development for both audiences.

<u>PSEL Standard</u>	<u>MONTANA PEPPS STANDARD</u> 10.58.705	<u>NSBA Framework/Beliefs and Policies</u>
1. Mission, Vision, and Core Values	Facilitate the development, articulation, implementation, and stewardship of a school or district vision of learning supported by the school community...	Vision Effective school boards establish a clear vision with high expectations for quality teaching and learning that supports strong student outcomes.

2. Ethics and Professional Norms	Act with integrity, fairness, and in an ethical manner in order to develop the full educational potential of each person through our public schools ...	NSBA believes public officials at all levels of government should model civil discourse in their deliberations, allowing for the thoughtful, beneficial, productive exchange of ideas and perspectives.
3. Equity and Cultural Responsiveness	Collaborate with families and other community members, respond to diverse community interests and needs, including American Indians and tribes in Montana and mobilize community resources...	NSBA urges education professionals and policy makers at all levels of government to promote and support the significant benefits of learning in racially, ethnically, linguistically, and socio-economically diverse settings...
4. Curriculum, Instruction and Assessment	Develop assessment and accountability systems to monitor and evaluate student progress and the impact of the instructional programs...	Accountability High academic standards, transparency, and accountability undergird a world-class education.
5. Community of Care and Support for Students	Promote the development of the full educational potential of each person...	NSBA believes that students must have safe and supportive climates and learning environments that support their opportunities to learn...
6. Professional Capacity of School Personnel	Develop the instructional and leadership capacity of staff...	NSBA believes that school boards should support professional development plans for teachers...
7. Professional Community for Teachers and Staff	Develop the capacity for distributed leadership to ensure teacher and organizational growth to support quality instruction and student learning...	NSBA recognizes the importance of a positive school climate in raising student achievement. To that end, NSBA urges school boards to assess the school climate and establish goals for its improvement.
8. Meaningful Engagement of Families and Community	Promote family engagement by fostering and sustaining positive relationships with parents, families, caregivers, community members, and partners...	Community Leadership Through public advocacy and community engagement, school boards share their concerns and actions with the public.
9. Operations and Management	Ensure proper management of the organization, operations, and resources for a safe, efficient, and effective learning environment...	Policy Policy is how a board sustainably exercises power to serve students. Through policy, school boards establish a set of cohesive guidelines to transform vision into reality.
10. School	Promote continuous and	NSBA urges all educational leaders to

Improvement	sustainable school and program improvement through the use of decision-making and problem-solving skills...	support policies and practices that help low performing schools that serve economically disadvantaged students to recruit and retain effective teachers and leaders...
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Resources Available

Montana State University. Under the 1862 Morrill Act and its land-grant directives, Montana State University (MSU) was established to serve students of the region by establishing high-quality educational opportunities, providing excellent research facilities, and conducting outreach to the public constituents. Since that time, MSU has exceeded its mission to educate students, create knowledge and art, and serve communities by integrating learning, discovery, and engagement. Students at MSU are given the opportunity to earn advanced degrees and faculty engage in opportunities to engage in exciting, cutting-edge research. The intellectual culture at MSU is one that places a high value on innovation and scientific advancement, and to that end fosters a supportive and highly collaborative environment. MSU has earned the Carnegie Foundation classification of “high research.” Research expenditures typically exceed \$100 million per year. In addition, the Carnegie Foundation for the Advancement of Teaching recently has recognized MSU for its dynamic and noteworthy “community engagement,” citing MSU’s excellent alignment among mission, culture, leadership, resources and practices. The recognition of MSU as one of 311 other colleges and universities similarly designated (out of 4,400 nationally), is based on MSU’s commitment to teaching that encourages volunteer service in communities and the spread of knowledge that benefits the public.

MSU College of Education, Health and Human Development. Our college's mission is about helping people achieve quality of life at every stage. We train teachers so that children throughout their school career will get the education they need to succeed in life. But we also

focus on enriching human well-being by helping families choose healthy foods and promote exercise to make strong bodies; provide counseling for healthy families; and provide home and environmental tips to make the world a better place. The mission of the Department of Education is to prepare highly qualified professional educators and administrators through exemplary campus and distance based programs and field placements in quality public and private schools. In addition, the department contributes to the State of Montana and the nation through the faculty's [active research](#) and [outreach efforts](#).

Our nationally (CAEP) and state-accredited teacher education programs, designed upon InTASC and state standards, are designed to provide rich, balanced teacher preparation, firmly grounded in content knowledge and contextualized in professional preparation coursework based on current educational theory and praxis. In addition to the coursework of the Department's teacher education programs are the field experiences, which are carefully structured, iterative, and supervised. The integration of these two learning experiences allows students to develop and demonstrate the breadth of knowledge, competencies and professional commitment that empowers them to contribute and to lead in a dynamic professional environment upon graduation. Teacher education faculty are tenure track or tenured scholars, many of whom have public K-12 teaching experience. These faculty effectively link research with practice within program design and coursework. Additional clinical faculty provide course instruction and supervision based upon many years of experience in public K-12 schools.

Library. The MSU Renne Library supports the learning and research needs of MSU students, faculty, and staff, wherever they are located, whether on campus or at a distance. The MSU Library is well-positioned to provide research assistance and library instruction to remote

students and faculty, either synchronously or asynchronously, through such means as web conferencing, email, instructional videos and tutorials, and telephone.

The MSU Library's Ask the Library online research assistance platform includes options for students at a distance to get research help via telephone, chat, and email. Among the ~275 research databases provided by the MSU Library, approximately three dozen are relevant to the research needs of Education students and faculty. Additionally, the MSU Library subscribes to approximately 19,000 journals, 90-plus percent of which are available online, as well as approximately 350,000 e-books. In addition to the MSU Library's robust online holdings, they provide rapid interlibrary loan services and will mail physical materials to distance students.

Technology. MSU offers a number of services that support the delivery of distance education along with a collection of tools that allow for increased student engagement in online courses. The core of the technological infrastructure for MSU's online teaching and learning is BrightSpace by Desire2Learn, the campus' learning management system. BrightSpace supports distance education by providing an inclusive and accessible platform through which instructors can facilitate asynchronous learning for students. BrightSpace has tools that encourage collaboration (chat, Wiggi), the development of community (discussions, groups) and support the integration of instructor presence in online courses (voice notes, intelligent agents). MSU has an extended support contract with Desire2Learn that allows end-users to access 24/7 technical support for the learning management system. MSU has site licenses for a number of cloud-based tools that students and instructors can access from wherever they are. These tools include: TechSmith Relay/Camtasia Studio (Video creation and editing), Adobe Creative Cloud (Content Authoring Tools), Office 365 (Microsoft productivity tools), WebEx Meetings (Video

conferencing), and WebEx Teams (Productivity/Collaboration tool - video calling, chat, file sharing)

Career Services. Montana State University has demonstrated a clear commitment to supporting the recruitment of teacher candidates to serve rural school districts across Montana. For over a decade, the Department of Education and the Allen Yarnell Center for Student Success have partnered to host the Teach MT Career Fair, which focuses particularly on providing a place for Montana’s rural school districts to recruit teacher candidates. Additionally, the Rural Colloquium is a networking lunch and event in which teacher candidates interact with and learn from school leaders in an informal, roundtable setting. Together, these two career events will support TRs to learn more about the teaching profession in rural areas and job placement opportunities in Montana’s highest needs LEAs. In accordance with **absolute priority IIc(3)iii and IIc(3)d**, Career Services will assist in obtaining from the chief administrative officer of the LEA in which a TR begins employment, a certificate of employment each year in which the teacher is retained. MAT staff will track these certifications to determine whether TRs meet the full program requirements as outlined in the signed contract.

Center for Research on Rural Education (CRRE). The current work of [CRRE, led by Co-PI Downey](#), is well-aligned with the TQP grant priorities in terms of strengthening the preparation for new teachers and providing resources for Montana’s rural teachers and leaders. CRRE staff will play a critical role in communicating the grant program to eligible, high-needs schools and working with local school leaders and community members to identify potential applicants. CRRE will lead the development of the induction and mentoring component of the multi-layered program.

Science Math Resource Center (SMRC). STEM literacy provides the foundation for a competitive and creative work force, and collective well-being. Problem solving, computational and systems thinking are interdisciplinary, playing a central role in the preparation of teachers and education of K-12 students. [SMRC](#) promotes teaching and learning excellence in K-12 formal and informal settings for students and educators across the State of Montana. TRs and inductees will attend the annual Science Summer Institute presented by SMRC in partnership with Southwest Montana School Services.

Center for Bilingual & Multicultural Education (CBME). Montana has a constitutional mandate that “recognizes the distinct and unique cultural heritage of American Indians” and “is committed in its educational goal to the preservation of their cultural integrity” (Montana Code Annotated, 20-1-501). In accordance with **general program requirement 7**, [CBME](#) will assist in the preparation of TRs and inductees by providing content in both coursework and the induction and mentoring program that will prepare all participants to teach students who are limited English proficient. This coursework and professional development program was developed through a [USDOE Office of English Language Acquisition](#) National Professional Development grant (FY2016, #T365Z160163). CBME will also provide TRs and inductees with resources so that they can integrate the mandated Indian Education for All content across the curriculum in all subjects and at all grade levels.

Academic Technology and Outreach (ATO). MSU has partnered with ATO to host a summer camp for local youth. Drawing on the successful [Peaks and Potentials camp](#), elementary education TRs and inductees will practice methods of teaching creative arts, health enhancement (including STEM content), and literacy in a summer camp field experience. ATO has abundant experience putting on a variety of educational events for children and youth that incorporate the

expertise of faculty across the disciplines. They especially emphasize out-of-school opportunities for STEM learning.

Student Counseling. MSU Counseling & Psychological Services (CPS) are available to all registered MSU students. For students at a distance, CPS serves as the initial point of contact and makes targeted referrals to mental health care providers in the student’s local area. CPS also has a wealth of self-help resources available on their [website](#). Within these resources is Welltrack, an online interactive self-help app designed to help students who may be struggling with concerns.

Management Plan, Coordination Strategies, Advisory Board, and Timeline

Management Plan and Coordination Strategies. Principal Investigator [REDACTED] will provide overall direction and program management. [REDACTED] will coordinate all aspects of the project using project management software such as [Teamwork Projects](#), which provides mechanisms for planning, collaboration, communication, and reporting. In order to design, deliver, and evaluate the program, the below table outlines project personnel, partners’, and participants’ responsibilities. See Appendix F for a detailed project timeline.

Role	Responsibilities
PI and co-PIs	Provide overall direction and management, nurture and sustain program partner relationships, satisfy reporting requirements
Project Staff	Implement the day-to-day operations of the program
Project Partners	Implement and manage program activities per letter of commitment
External Evaluator	Implement and complete evaluation plan
Participating LEAs	Implement and manage program activities per letter of commitment
Advisory Board	Provide feedback and input for continuous improvement
Program Faculty/Field Supervisors	Provide high-quality instruction and supervision of TRs per FPLO requirements
Cooperating Teachers	Provide high-quality supervision of TRs per FPLO requirements

Inductee Mentors	Provide high-quality mentoring of inductees per best practice
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Advisory Board. We will establish an advisory board comprised of state stakeholders and national experts. The Advisory Board will meet virtually via WebEx biannually to receive program updates and to provide feedback for continuous improvement. Individuals are yet to be determined. The table below describes the organization/stakeholder group and rationale for inclusion.

Advisory Board	
Organization/Stakeholder Group	Rationale
Montana Board of Public Education	The Montana Constitution empowered the Board of Public Education to supervise, serve, maintain, and strengthen Montana's system of free quality public elementary and secondary schools.
Montana Board of Regents	The Board of Regents has full power, responsibility, and authority to supervise, coordinate, manage and control the Montana University System, and supervise and coordinate other public educational institutions assigned by law.
Montana Advisory Council on Indian Education	MACIE advocates for greater cooperation among tribal, state and federal organizations, institutions, groups and agencies for the express purpose of promoting high-quality education and equal educational opportunity for Montana's Indian students.
Board Member/Trustee	These individuals representing eligible LEAs will provide valuable first-hand experiences to shape the integrated program and ensure the intended outcomes are met.
Superintendent	
Principal	
Elementary Teacher	
Secondary Teacher	
MAT Teacher Resident/Inductee	These individuals will provide expertise to ensure that the program aligns with evidence-based best practices in rural

Rural Education National Expert	teacher training and induction.
MSU Teacher Education Program Faculty Member	

Evaluation Plan

██████████ is Principal at The Gordon Group, Lake Chelan, WA. She will serve as external evaluator for the multi-layered program. ██████████ has over fifteen years' experience in program evaluation and has been external evaluator on multiple large federal grants for NSF and USDOE. In addition to her expertise in evaluation and research, she brings over twenty-five years' experience working in Montana Indian Country, where many eligible LEAs are located.

██████████ uses a participatory approach to evaluation that closely engages stakeholders in the process including timely discussions about formative information and implications for program implementation. Annual reports will be developed as well as a final summative report.

██████████ plan is designed to evaluate the implementation and impact of the integrated program's objectives to design and deliver effective rural teacher preparation and induction. The multi-layered program consists of the Teacher Residency (through the MAT program), two years' induction and mentoring after MAT graduation, and professional development for school and district leaders and elected school board members.

A mixed methods program evaluation design (Greene, Caracelli, & Graham, 1989) will provide performance feedback (formative and summative) and permit periodic assessment of progress toward achieving intended outcomes. Data sources include surveys, interviews and/or focus groups, validated instruments, teacher recruitment and retention data, teacher resident tracking during the MAT program and post-graduation, and examination of artifacts. An

application will be filed with the MSU Institutional Review Board and no data will be collected until IRB approval has been received. Participants will be guided through an Informed Consent Form and any questions will be answered prior to signature.

Basic demographic information will be collected from all individuals who consent to participate. Data will be blinded. In cases where individuals may be identified even after blinding due to the very rural nature of this program, only the evaluator and project personnel (PIs, co-PIs, and the GRA) will have access, and information that could potentially breach confidentiality will not be included in external documents for dissemination. Electronic templates for recording data will be supplied for the program's record keeping and will be kept in MSU's secure data management system. Datasets for public access will be deposited in MSU's institutional repository, ScholarWorks, where they are preserved in perpetuity. Analysis will be led by Dr. Gordon, assisted by the graduate research assistant. Data will be analyzed using Statistical Package for Social Sciences (SPSS) for quantitative analysis and Dedoose for qualitative narrative analysis. The evaluation design is outlined in the table below.

Evaluation Questions	Data Sources	Data Collection Timing and Analysis
Question 1: What evidence is there that the the integrated program is being successfully implemented?		
1.1. What is the process of recruiting high ability, diverse candidates into MAT as Teacher Residents and what are their demographics?	Interview/Focus Group (I/FG) with program leadership	Y1-Y3; annually/QNA
1.2. How many participants are in each MAT program as Teacher Residents and what are their demographics?	Program records	Y1-Y3; annually/descriptive statistics

<p>1.3. Do TRs, mentors and partner schools perceive sufficient support to enable success of the integrated program (preparing teacher residents, providing two years' induction support for teacher residents, and providing professional development for school leaders and school board members)?</p>	<p>Survey participants, mentors and partner school administrators/board members; I/FG with purposeful sample of participants</p>	<p>Y1-Y5 annual survey/descriptive statistics Y1-Y5; I/FG annual/QNA</p>
<p>1.4. What is being learned in the implementation of a rural teacher recruitment and retention program?</p>	<p>I/FG with program leadership</p>	<p>Y1-Y5; annual/QNA</p>
<p>1.5. What challenges are being encountered and how have they been mitigated?</p>	<p>I/FG with program leadership</p>	<p>Y1-Y5; annual/QNA</p>
<p>Question 2: What effects do the programs have on the recruitment and retention of rural teachers?</p>		
<p>2.1. How many participants are successfully completing each program with MAT TR+2 years of Induction?</p>	<p>Program records</p>	<p>Y3-Y5; annual/descriptive statistics</p>
<p>2.2. If participants leave, what are the reasons and how does the information inform programming?</p>	<p>I/FG with program leadership</p>	<p>Y1-Y5; annual/QNA</p>
<p>2.3. What evidence is there that MAT TR+Induction is impacting the recruitment and retention of rural teachers?</p>	<p>Montana Office of Public Instruction (OPI) records; MAT records; I/FG with purposeful sample of participants</p>	<p>Y1-Baseline; Y2-Y5 annually/descriptive statistics</p>
<p>2.4. What are the gaps in the rural teacher job pool and to what extent is MAT TR+Induction helping to mitigate these gaps?</p>	<p>Montana OPI records; MAT records</p>	<p>Y1-Baseline; Y2-Y5 annually/ descriptive statistics</p>
<p>2.5. How many MAT Teacher Resident graduates are being employed by rural schools?</p>	<p>Montana OPI records; MAT records</p>	<p>Y1-Baseline; Y2-Y3 annually/ descriptive statistics</p>

<p>2.6. How do employers rate their satisfaction and describe teachers who have participated in the MAT TR+Induction programs (ex. teaching effectiveness, leadership, collaboration, integration into community, etc.)</p>	<p>Survey employers using state-developed instrument; I/FG with purposeful sample of employers</p>	<p>Survey Y1-Y5 annually; I/FG Y1-Y5 annually/QNA</p>
<p>Question 3. What are participants' perceptions of the efficacy of the integrated program?</p>		
<p>3.1. How well do aspects of the program (such as cohesiveness, sequential development, etc.) support TR+Induction participants' learning needs and attainment of credentials?</p>	<p>Participant Satisfaction Survey</p>	<p>Y1-Y5 annually/descriptive statistics and QNA for open-ended items</p>
<p>3.2. How satisfied are the participants with logistics and other aspects (ex. mentors, teaching schools, financial support, commitment, etc.)</p>	<p>Participant Satisfaction Survey</p>	<p>Y1-Y5 annually/descriptive statistics and QNA for open-ended items</p>
<p>3.3. What recommendations do participants make for improvements?</p>	<p>Participant Satisfaction Survey</p>	<p>Y1-Y5 annually/descriptive statistics and QNA for open-ended items</p>
<p>3.4. What program elements are viewed as essential for building capacity and sustainability over time?</p>	<p>Advisory Board FG</p>	<p>Y1-Y5 annually/QNA</p>
<p>3.5. To what extent is the integrated program aligned to the realities and needs of K-12 education in rural settings?</p>	<p>Advisory Board FG</p>	<p>Y1-Y5 annually/QNA</p>
<p>Question 4. In what ways do participants exhibit a deeper understanding and application of the knowledge and skills needed to effectively teach, mentor, and enact policy that supports teacher recruitment and retention?</p>		
<p>4.1. Does participation in the MAT TR+Induction program increase completers' motivation to teach in rural schools?</p>	<p>Participants will be asked the semester following completion of the MAT as to</p>	<p>Y1-Y3; Annually at the end of each program year/demographic</p>

	whether they are employed in a rural school.	information and descriptive statistics
4.2. Does participation in MAT TR+Induction increase teacher retention in a rural school?	Participants will be asked upon the conclusion of Induction as to whether they are employed in a rural school.	Y3-Y5; Annually at the end of each program year/ demographic information and descriptive statistics
4.3. How does participation in MAT TR+Induction program impact job satisfaction?	Scales used in Sass, Seal, & Martin's (2010) predictive teacher retention model	Y2-Y5; Annually at the end of each program year/ Analytic technique outlined in in Sass, Seal, & Martin's (2010) predictive teacher retention model
4.4. How does participation in the school leader and school board member professional development portion of the integrated program increase participants' understanding of teacher recruitment and retention efforts in rural areas?	Stages of Concern Questionnaire (SoCQ), Hall & Hord, 2015	Y1-Y5; pre- and post- / Analytic technique outlined in Hall & Hord, 2015

Project Timeline

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2019-2020

	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	July	Aug
Hire/Train Graduate Research Assistant												
Recruit Advisory Board												
Refine Evaluation Plan/Secure IRB Approval												
Certify LEAs (OPI)												
Recruit TRs (OCHE + Partners)												
E1 Ed Cohort 1 Begins												
Secondary Cohort 1 Begins												
Cohort 1 TR Begins												
Annual Grant Reporting												
Month	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	July	Aug

2020-2021

	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	July	Aug
Certify LEAs (OPI)	■											
Recruit TRs (OCHE + Partners)	■	■										
El Ed Cohort 2 Begins						■						
Secondary Cohort 2 Begins									■			
Rural Colloquium/ Teach MT Career Fair							■					
Cohort 1 TR Completes									■			
Cohort 1 Induction Begins												■
Annual Grant Reporting												■
Month												

2021-2022

	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	July	Aug
Certify LEAs (OPI)	■											
Recruit TRs (OCHE + Partners)	■	■										
El Ed Cohort 3 Begins							■					
Secondary Cohort 3 Begins									■			
Rural Colloquium/ Teach MT Career Fair								■				
Cohort 2 TR Completes									■			
Cohort 2 Induction Begins												■
Annual Grant Reporting												■
Month												

2022-2023

	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	July	Aug
Certify LEAs (OPI)	█											
Recruit TRs (OCHE + Partners)	█											
Cohort 1 Induction Complete										█		
Rural Colloquium/ Teach MT Career Fair								█				
Cohort 3 TR Completes										█		
Cohort 3 Induction Begins												█
Annual Grant Reporting												█
Month	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	July	Aug

2023-2024

	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	July	Aug
Certify LEAs (OPI)	█											
Graduate Research Assistant Completes									█			
Cohort 2 Induction Complete										█		
Annual Grant Reporting												█
Month	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	July	Aug

2024-2025

Certify LEAs (OPI) Cohort 3 Induction Complete Final Grant Reporting and Close Out																			
Month	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	July	Aug							

Contributions to Practice and Sustainability

Contributions to Practice. This multi-layered program will inform the design and delivery of future programs for rural and remote teachers as well as other teacher populations facing limitations of distance, time, funding, and other circumstances. As stated in the introduction of this proposal, we believe that the only way to resolve the teacher recruitment and retention crisis in rural Montana is to work together. MSU heard the call from stakeholders in our most rural areas and responded by developing the MAT, which is currently the only teacher preparation program in the state that is distance delivered and leads to initial licensure. We have established partnerships with nearly every major state organization devoted to improving K-12 education—in a state as rural as ours, we cannot work in silos. Therefore, we have described in this proposal a model that other states with sparse population could look to as proof-of-concept.

Sustainability. The Montana Board of Education adopted a [rule, effective July 2013](#), that states that “the local board of trustees shall...establish mentoring and induction programs to assist licensed staff in meeting teaching standards”. However, no stable funding was provided in order to ensure that all school districts could provide this important service for novice teachers. The Office of Public Instruction assisted in mitigating some of the financial constraints by creating the [Teacher Learning Hub](#) which houses online professional development modules, and is in the process of creating specific modules for mentoring and induction in its contribution to this proposal. Our partner Southwest Montana School Services, serving the largest Regional Education Service Area in the state, also attempts to mitigate the gap through providing fee-for-service online and F2F induction and mentoring content to school districts.

However, mentoring and induction programs are uneven in districts across the state. This is felt most acutely by our smallest school districts, where the elementary principal may also be

the French teacher and drive the school bus, or the family and consumer science teacher may also be the track and field coach and sponsor three clubs. There is simply not enough staff in a very small school district to implement such a program. During the 2019 Montana legislative session, a [pair of bills](#) were introduced that would have provided permanent allocations to address teacher recruitment and retention. Unfortunately, both bills failed. This proposal, if funded, will yield valuable information that will be disseminated to stakeholders and policymakers about effective design and delivery of a statewide teacher residency with an induction and mentoring component, in anticipation of future work toward sustainable statewide solutions for rural teacher recruitment and retention.

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