LEVEL II MEMORANDUM

DATE: October 24, 2014

TO: Chief Academic Officers, Montana University System

FROM: Neil Moisey, Deputy Commissioner for Academic, Research, & Student Affairs
John Cech, Deputy Commissioner for Two-Year & Community College Education

RE: Level II Submission Items

The campuses of the Montana University System have proposed new academic programs or changes under the Level II approval process authorized by the Montana Board of Regents. The Level II proposals are being sent to you for your review and approval. If you have concerns about a particular proposal, you should share those concerns with your colleagues at that institution and try to come to some understanding. If you cannot resolve your concerns, you need to raise those concerns at the Chief Academic Officer's conference call on **Wednesday, October 29**. Issues not resolved at that meeting should be submitted in writing to OCHE by noon on **Friday, October 31.** That notification should be directed to Elizabeth Baker, Assistant to the Deputy Commissioners. If Elizabeth does not hear from you, in writing, by **noon on 10/31**, OCHE will assume that the proposals have your approval.

The Level II submissions are as follows:

Montana State University-Bozeman:

- Request to establish a Ph.D. degree in Education
  ITEM #165-2010-R1114 | Level II Request Form | Curriculum Proposal

The University of Montana-Missoula:

- Request for authorization to establish a Center for Children, Families and Workforce Development
  ITEM #165-1009-R1114 | Level II Request Form | Curriculum Proposal |Attachment #1 | Attachment #2

Montana Tech of the University of Montana:

- Request to establish a B.S. Degree in Applied Health and Safety Sciences
  ITEM #165-1505-R1114 | Level II Request Form | Curriculum Proposal

November 20-21, 2014

ITEM 165-2010-R1114

Request for authorization to establish a Doctor of Philosophy Degree in Education

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THAT

The Montana Board of Regents approves Montana State University to offer a Ph.D. degree in Education.

EXPLANATION

The purpose of this proposal is to establish a Ph.D. program in Education with three options in the areas of Adult and Higher Education, Educational Leadership, and Curriculum and Instruction. The Ph.D. in Education will be specifically designed for graduate students seeking faculty or administrative positions in higher education or positions within research organizations that require educational research in highly specialized disciplines. Graduates of the Ph.D. program in Education will be well-positioned to directly and positively affect the data-driven culture related to improving the educational systems of Montana and beyond. Currently, there is no other Ph.D. in Education degree offered in the state and there is a need for this advanced degree that will serve to address the following needs:

- ***Expand educational options for Montana students.*** By offering a Ph.D. in Education, we are responding to the labor market professionalization and specialization that has taken place as the traditional college or university transforms to meet the needs of a more diverse student body and expectations of a changing public and stakeholders. Montana State University currently offers an Ed.D. in Educational Leadership, Curriculum and Instruction and Adult and Higher education. However, students today want to be able to choose between an Ed.D. or Ph.D. in these respective areas that allows them to tailor their educational programs to meet the market demands of their desired career goals.
- ***Clarify the role of the Ed.D and Ph.D.*** Nationally the trend is to clarify the role and value of both the Ed.D and Ph.D. degrees. The Ed.D is designed for working educators and practitioners seeking administrative career paths and focuses on the skill sets needed for effective educational leadership, management, and data analysis. The Ph.D. is meant to fit the traditional social science Ph.D. model and is designed for individuals who seek an academic and research-oriented career path (Redden, 2010).
- ***Train doctoral students to become faculty members or educational researchers who are prepared to engage in scientifically-based, cutting-edge research in Education.*** Offering a research-based doctoral degree that educates leaders, teachers, and administrators to solve problems and develop data-based solutions in K-12 public education has never been more important. It is critical that we develop scholars who can generate new knowledge through cutting edge research that provides direction for addressing an increasingly complex set of educational issues currently faced by K-12 school systems and higher education.

ATTACHMENTS

Level II Request Form
Curriculum Proposal

Montana Board of Regents

LEVEL II REQUEST FORM

Item Number: **165-2010-R1114** Meeting Date: **November 20-21, 2014**

Institution: **Montana State University** CIP Code: **13.0601**

Program Title: Ph.D. Degree in Education

Level II proposals require approval by the Board of Regents.

Level II action requested *(place an X for all that apply and submit with completed Curriculum Proposals Form):*

Level II proposals entail substantive additions to, alterations in, or termination of programs, structures, or administrative or academic entities typically characterized by the (a) addition, reassignment, or elimination of personnel, facilities, or courses of instruction; (b) rearrangement of budgets, cost centers, funding sources; and (c) changes which by implication could impact other campuses within the Montana University System and community colleges. Board policy 303.1 indicates the curricular proposals in this category:

___ **1. Change names of degrees (e.g. from B.A. to B.F.A.)**

___ **2. Implement a new minor or certificate where there is no major or no option in a major;**

X **3. Establish new degrees and add majors to existing degrees; and**

___ **4. Any other changes in governance and organization as described in Board of Regents' Policy 218, such as formation, elimination or consolidation of a college, division, school, department, institute, bureau, center, station, laboratory, or similar unit.**

Specify Request:
Montana State University requests authorization by the Montana Board of Regents to offer a Ph.D. in Education degree. The purpose of this proposal is to establish a Ph.D. program in Education with three options in the areas of Adult and Higher Education, Educational Leadership, and Curriculum and Instruction.

The Ph.D. in Education will be specifically designed for graduate students seeking faculty or administrative positions in higher education or positions within research organizations that require educational research in highly specialized disciplines. Graduates of the Ph.D. program in Education will be well-positioned to directly and positively affect the data-driven culture related to improving the educational systems of Montana and beyond. Currently, there is no other Ph.D. in Education degree offered in the state.

Montana Board of Regents

CURRICULUM PROPOSALS

A Proposal to the Board of Regents of the Montana University System Requesting Approval to Initiate a Ph.D. Degree in Education Program

1. **Overview**

The purpose of this proposal is to establish a Ph.D. program in Education with three options in the areas of Adult and Higher Education, Educational Leadership, and Curriculum and Instruction. **The Ph.D. in Education is designed for graduate students seeking faculty or administrative positions in higher education or positions within research organizations that require educational research in highly specialized disciplines.** Specifically, this Ph.D. program will prepare students to develop knowledge and conduct research related to six (6) major areas of strength among our existing faculty: (1) Leadership and Policy Analysis (2) STEM Education, (3) the K-20 Trajectory, (4) Online and Distance Education Delivery, (5) Pedagogy and Teacher Preparation, and (6) Education Evaluation, Assessment, Research Design and Analysis. Special emphasis in these major research areas will address topics specific to Montana including working with rural communities and Native Americans on state and other educational issues. Graduates of this Ph.D. program in education will be well-positioned to directly and positively affect the data driven culture related to improving the educational systems of Montana and beyond. This program has been designed to align with Montana State University's strategic plan. The proposed Ph.D. in Education will advance the MSU Strategic Plan (2012) by contributing to the following main themes: Learning, Discovery, Engagement, Integration, and Access (see section 4, letter D below for specific details on the alignment).

2. **Description**

The Department of Education, located in the College of Education, Health and Human Development (EHHD), is requesting approval to offer a Ph.D. in Education with three options: Adult and Higher Education, Educational Leadership, and Curriculum and Instruction. The proposed 64 credit Ph.D. in Education program will be offered as terminal degree option for graduate students pursuing degrees in these three tracks. The Ph.D. in Education will provide graduate students with advanced statistical and research design theory coursework in addition to research apprenticeship experiences through interdisciplinary collaborations with other colleges and departments across campus. Additionally, these doctoral students will gain experience teaching in a variety of settings. The Educational Doctorate (Ed.D.), currently offered through the Department of Education, will continue to offer curricula designed to prepare effective practitioner-researchers in fields related to education.

3. **Need**

A. What specific need does this proposed doctoral program address?

Responding to Changing Student Demographics and a Need for Their Educational Options.

By offering a Ph.D. in Education, we are responding to the labor market professionalization and specialization that has taken place as the traditional college or university transforms to meet the needs of a more diverse student body and expectations of a changing public and countless stakeholders. Doctoral programs in education span the spectrum from practitioner-oriented programs to those that emphasize theory and research. While some combination of theory and practice is desirable for the sake of breadth,

targeted specialization is expected at the doctoral level. Students today want to be able to choose between an Ed.D. or Ph.D. program tailored to meet the market needs of their desired career.

Responding to the Need for More Preparation in Higher Education Administration

Throughout most of the history of higher education, administrators rose from the ranks of faculty- often following a straight-line path from non-tenured faculty, to tenured faculty, to department chair, and then onto upper administrative and executive positions. Recently, a marked shift has occurred whereby many higher education professionals enter administration without holding faculty rank or department chair positions. This shift in who is being hired for higher education administration has occurred as the roles and duties of higher education administrators and executives have become more corporate, managerial, and based on outreach and fundraising (Bousquet & Nelson, 2008). There is a significant need to offer advanced degree programs for individuals aspiring to serve in higher education student and academic support services. For example, individuals aspiring to hold positions in Residence Life, Office of Student Engagement and Office of Student Success.

Responding to the Need for Faculty Members to Conduct Cutting Edge Research in Education.

Education, including K-12 public education and higher education, are at an important crossroads. Organized groups such as the National Council on Teacher Quality (NCTQ), and PayScale.Com have published non-scientific, negative, and controversial reports on higher education's contribution to training teachers for K-12 public education. Many of these reports are based on small sample sizes, and data that are not valid and reliable. Policies are being promoted based on questionable research designs and statistical analyses, and for reasons other than the potential to improve student learning. Offering a research-based doctoral degree that educates leaders, teachers, and administrators to solve problems and develop data-based solutions in K-12 public education has never been more important. Given the increasing complexity of educational issues, the constant criticism of K-12 public education, and the need to develop scholars who can generate research projects that address educational issues, it is absolutely essential to train our next generation of scholars to conduct cutting edge research. If we train these scholars to conduct research, education will be improved, especially in underserved and impoverished communities. In summary, a "one-size-fits-all" approach is no longer appropriate, and departments of education need to offer both an Ed.D. and Ph.D. degree to respond to market needs (Baez, 2002).

Nationally the trend is to clarify the role and value of both the Ed.D. and Ph.D. degrees. The Ed.D. is often designed for working educators and practitioners seeking administrative career paths. It focuses on the skill sets needed for effective educational leadership, management, and data analysis. Many argue that when only one degree is offered—especially that of the Ed.D.—the specialization focus of the degree becomes blurred and it does not serve the "scholar-practitioner" students who truly seek a leadership route. Many of the students enrolled in Ed.D. programs do not aim to be researchers, and are seeking a program that prepares students for leadership roles in higher education. The Ph.D. is meant to fit the traditional social science Ph.D. model and is often designed for individuals who seek an academic and research-oriented career path (Redden, 2010). As Montana State University continues to function as a top Carnegie rated university, the doctoral program in education needs to evolve into two clearly defined routes, serving both the Ed.D. practitioner and the Ph.D. academic and research track.

According to the Carnegie Project on the Education Doctorate (CPED), the best practice to improve the Ed.D. and Ph.D. is to offer separate programs in Education leading to the Doctor of Education and the Doctor of Philosophy (Carnegie Project on the Education Doctorate, 2012). This is achieved by creating two different but equal high-quality programs. This approach is similar to the programmatic and pedagogical

approach taken in the biomedical sciences that offer two degrees: the MD and the Ph.D. The recipients possess different but overlapping bodies of knowledge, view their professional practice through different lenses, and have been trained and assessed in ways specific to their intended professional commitments. Most importantly, education professionals are engaged in very different fields of practice; therefore, specialized education should be provided so students can learn to excel in specialized areas (Schulman, Golde, Bueschel & Garabedian, 2006). Table 1 summarizes differences between the Ed.D. and Ph.D. as established by the Carnegie Foundation (see Nelson & Coorough, 1994).

Importantly, part of the Department of Education's role is to contribute to MSU's land grant mission by preparing scholar-practitioners to serve the audiences in higher education (Adult and Higher Education), p-12 schools (Curriculum and Instruction) and the administration of those schools (Educational Leadership). The Ed.D. provides a vital role in preparing individuals that can tackle practice issues and devise solutions to improve the organizations where our graduates work. The Ph.D. in Education on the other hand, will complement the land grant mission by engaging in preparing scholars who can generate new theoretical knowledge to guide practice in the field. Ed.D. students and graduates will be prepared to test this new knowledge in efforts to solve practical problems they are likely to encounter in their professional practice as educators. Again, both programs serve to complement one another by collectively contributing to Montana State University's land grant mission to serve the state of Montana. To keep current with national trends we present a clarification of the current Ed.D. program and the proposed Ph.D. in Education program in Table 1.

Table 1

Differences between Ph.D and Ed.D Programs at MSU

Ed.D.	Ph.D.
The Doctor of Education degree (Ed.D.) will focus on educational administration and scholarly practice.	The Doctor of Philosophy degree (Ph.D.) will focus on research and scholarship.
Ed.D. will offer courses related to educational administration, policy studies, and applied knowledge and practice.	The Ph.D. in Education will emphasize a more extensive and thorough study of theory, analysis, and research methodology.
Ed.D. students will focus their dissertation research more narrowly on particular practices or policies that affect state or regional schools or school systems.	The Ph.D. in Education will have more courses related to research. Students who pursue the Ph.D. in Education are more inclined to study national or international trends or large-scale practices and to engage in the production of new knowledge.
	Ph.D. dissertations will use more multivariate statistics, have wider generalizability, and focus more on certain areas of concentration.
Preparation for leadership positions in K-12 schools and districts, state offices, and higher education student and academic support services.	Preparation for faculty positions in higher education.

Notes. Table Adapted from Carnegie Project on the Education Doctorate, 2012. About CPED. Retrieved from: http://cpedinitiative.org/files/Ed.D.%20vs.%20Ph.D.%20Comparison%20Charts.pdf

Currently there are no education Ph.D degrees in Education offered by any of the institutions of higher education in the state of Montana. Although, Montana State University offers a Ph.D. in Mathematics Education and a Ph.D. in Physics Education, these doctoral programs differ in content and focus from the proposed Ph.D. in Education program. The Ph.D.s in Mathematics and Physics Education are heavily oriented toward discipline specific content knowledge as well as some coursework designed to prepare graduates to engage in scholarly activities. The Ph.D. in Education, however, is focused on the study of educational theory and using scientific inquiry to generate new knowledge in the areas of Leadership and Policy Analysis, STEM Education, the K-20 Trajectory, Online and Distance Education Delivery, Pedagogy and Teacher Preparation, and Education Evaluation, Assessment, Research Design and Analysis.

This Ph.D. in the Education program will serve to expand the scale, breadth and quality of doctoral education at Montana State University, and across the Montana University System. One of the strategic plan goals for Montana State University is to increase the graduate student population by 20 percent by 2019 (Montana State University's Strategic Plan, 2012, retrieved March 20, 2014 from http://www.montana.edu/strategicplan/). New students enrolling in this Ph.D. program will help to accomplish this goal. The addition of this program will also support the university's goal of providing doctoral candidate apprentice researchers who can collaborate with faculty to increase research productivity in the form of publications and grants. Preparing Ph.D. level scientists will increase capacity to collaborate with other campus scientists in developing the educational and outreach components of funded projects such as those associated with the National Science Foundation (NSF). Establishing a Ph.D.

in Education will elevate the research excellence and recognition of MSU faculty and help to improve MSU's rank among Carnegie Classified Research Universities.

B. How will students and any other affected constituencies be served by the proposed program?

The economic climate and future growth potential for the state of Montana will be contingent, in part, on the development of a viable, sustainable workforce and the need for Ph.D. level individuals to drive the academic and administrative processes involved. The innovation required to create the desired workforce often comes from the rich, robust knowledge created by educational research, often initiated and conducted by Ph.D.'s in education. The cultural, geographic, economic and community variables of Montana are quite unique. Therefore, those who have been trained in Montana institutions will likely best understand these conditions, making a Ph.D. program in education vital. Ed.D. and Ph.D. graduates will serve the needs of employers in the state and greater Rocky Mountain Region who require individuals with advanced degrees who can solve educational problems.

MSU-Bozeman is the largest Teacher Education Program in Montana and the addition of the Ph.D. Program in Curriculum and Instruction as well as the Ph.D. programs in Adult and Higher Education and Educational Leadership will allow us to prepare highly skilled educators who can serve as researchers and professors of Teacher Education in the areas of K-12 Curriculum, English/Language Arts Education, Social Studies Education, and Science Education. It is our belief that our Ph.D. program in Education will elevate the status, effectiveness, and expertise of teacher education in Montana and help to strengthen the preparation of the next generation of new teachers.

Given the current implementation of the Common Core State Standards in English/Language Arts and Mathematics, the Next Generation Science Standards, and the Smarter Balanced Assessment program, the need has never been greater for MSU to prepare highly-skilled researchers and teacher educators who can collaborate with Montana's K-12 educators to develop data-based best practices for K-12 teaching and learning. Never before has preparation for increasing accountability been more important. In addition, new requirements set forth by our own teacher preparation accreditation board (the Council for the Accreditation of Educator Preparation or CAEP), will require departments to hire individuals trained to conduct research related to assessment. Our proposed Ph.D. programs in Adult and Higher Education, Educational Leadership, and Curriculum and Instruction will support these state-wide education reform efforts and provide enhanced opportunities to bridge the university/public education divide.

Table 2.
Need for A Ph.D. program in Education

Need: • Greater research connectivity across disciplines - more opportunity for interdisciplinary research • Preparing future scholars and researchers for higher education, supporting P-20 initiatives (including increasing accountability demands), & research-based organizations • Need to conduct top quality research to address negative, non-scientific attacks on education • Need to train graduates to contribute to research examining the effectiveness of the Common Core, the new science standards, and the Smarter Balanced assessment (all of which are adopted by K-12 Montana schools) • Need to develop valid and reliable measures for CAEP accreditation of educator preparation programs • The only Education Ph.D. program in the state
Strategic Plan Support: • Elevate the research excellence and recognition of MSU faculty • By 2019, MSU will improve its rank among Carnegie Classified Research Universities • Increase graduation rates at MSU • By 2019, the number of MSU education doctoral degrees awarded will increase from 3 to 12 per year
Ph.D. Options: • Curriculum and Instruction • Adult & Higher Education • Educational Leadership

C. What is the anticipated demand for the program? How was this determined?

Several informal surveys were conducted in 2013 with current graduate students in Education regarding the need for a Ph.D. program. For example, current Ed.D. Curriculum & Instruction students were sent an email requesting that they indicate their interest in pursuing a Ph.D. in Education. Thirty-eight percent (30) Curriculum & Instruction graduate students indicated an interest in pursuing the Ph.D. in Education option. The faculty in Adult & Higher Education led focus groups with their graduate students and found that 80% (64) of their students were interested in pursuing a Ph.D. in Education with emphasis in Adult and Higher Education. The Educational Leadership faculty polled current Ed.D. students during coursework and professional conferences and determined that 15% (21) were interested in pursuing a Ph.D. in Education degree. Currently, the Department of Education receives on average per semester, 23-35 inquiries about the Ph.D. in Education program across program areas. Current Ed.D. students desiring to pursue a Ph.D. in Education will have to reapply and meet the Ph.D. in Education program requirements in Table 9.

4. Institutional and System Fit

A. What is the connection between the proposed program and existing programs at the institution?

Currently, the Department of Education offers an Educational Doctorate (Ed.D.) in Adult and Higher Education, Curriculum and Instruction, and Educational Leadership. This advanced degree is for those who are primarily interested in pursuing administrative leadership in educational institutions or related organizations. The Ed.D. curriculum emphasizes the development of thoughtful and reflective practitioners who can identify and solve complex problems in education. This program goal is

accomplished through a curriculum that integrates research-based content, theory and practice. Students demonstrate their ability to operationalize these program elements through research-based, applied classroom and thesis projects. The emphasis is to produce graduates who can conduct well-designed research that can inform educational practice.

The Ph.D. in Education is designed to prepare professional researchers, scholars or scholar practitioners. A primary goal of this program is to produce graduates who develop competencies in educational scholarship and research that focuses on producing new knowledge. The Ph.D. curricula is investigative in nature with a greater emphasis on developing a deeper understanding of research methodologies. Special emphasis is placed on research design, statistical analysis, synthesis and scientific writing.

MSU has the faculty and institutional expertise to support the six focused research areas proposed by the Ph.D. in Education program. For example, institutes such as the Burton K. Wheeler Center, Jake Jabs Center for Entrepreneurship and The Institute of the Environment will provide outstanding opportunities for collaborative research efforts. Additionally, the Department of Education's Indian Leadership Education Development (ILEAD) program and the Center for Bilingual and Multicultural Education will provide further opportunities to support Ph.D. research. The synergy of these components will result in the establishment of a solid foundation for the expansion of interdisciplinary research across campus. Importantly, these efforts will foster the career development of graduate students and create a pipeline of new researchers with interest and expertise in important and contemporary educational issues across disciplines.

In addition, this program provides foundational coursework (e.g., research and statistics) for a potential Ph.D. program in Health and Human Development. A comparison of program features of the Ed.D. and Ph.D. degrees in Education is presented in Table 3.

Table 3
Comparison of Proposed Ph.D. in Education Coursework to Current MSU Ed.D. Coursework

Ph.D.	Current Ed.D.
Residency: Three terms of enrollment as a full time student. Terms here are defined as Fall or Spring.	Residency: None
Core Courses (13 credits)	Core Courses (12 credits)
Advanced Study to Options (15credits)	Advanced Study to Options (15credits)
Research Skills (9 credits)	Research Skills (9 – 12 credits)
EDCI 502 Statistics II	EDCI 502 Statistics II
EDCI 507 Qualitative Research Methods	EDCI 507 Qualitative Research Methods
EDU 607 Quantitative Research Methods	EDCI 607 Quantitative Research Methods
Advanced Research Skills (9 credits)	Advanced Research Skills
Minimum of 9 credits beyond basic credits	None
Internship	Internship
None	3-9 credits (optional based on previous experience) internship or practice based courses.
Dissertation (18 credits)	Dissertation (14credits)

B. Will approval of the proposed program require changes to any existing programs at the institution?

The ***content courses*** for Adult & Higher Education, Educational Leadership, and Curriculum and Instruction options will not change drastically. For example, the Curriculum and Instruction Ed.D. and Ph.D. will emphasize discipline-specific specializations through existing coursework. Additional statistics and research courses, along with research apprenticeships, will be required of the Ph.D. graduates. The Ed.D. program will continue to focus on scholarly practice, leadership and administrative roles, courses related to policy of practice and dissertation research focused on particular practices or policies that affect state or regional schools or institutions of higher education (see Tables 1 and 2).

The Ph.D. in Education program will prepare students to develop knowledge and conduct research related to six (6) major areas of strength among our existing faculty: (1) Leadership and Policy Analysis (2) STEM Education, (3) the K-20 Trajectory, (4) Online and Distance Education Delivery, (5) Pedagogy and Teacher Preparation, and (6) Education Evaluation, Assessment, Research Design and Analysis.

Both the Ed.D. and Ph.D. credentialed faculty in the Department of Education will be active in the training of Ph.D. students, and will be able to serve on Ph.D. committees in addition to functioning as major advisors and committee chairs. Over the past 15 years, the Department of Education has made a commitment to hire both Ph.D. and Ed.D. faculty with active research agendas and who have been prepared to engage in scientifically-based research. Our research expertise includes the use of data from the National Center for Educational Statistics (NCES) as well as state, and national achievement data analysis, community-based participatory research, indigenous methodologies for research, the efficacy of innovative technologies and grant evaluations. This overview of the faculty's research interests and skill-

sets provide a solid foundation for generating new knowledge and solving problems related to theory and practice in the field of education.

Collectively, both our Ed.D. and Ph.D. faculty have the research experiences and training to effectively mentor and chair committees both Ph.D. students. Our faculty are strong in terms of publishing and grant activity/funding. For example, in 2013 the Department of Education faculty produced 43 publications, 67 research presentations, and 17 grant proposals. As of 2013, the Department of Education has obtained grants totally approximately 1.8 million dollars. Tables 4, 5 and 6 present the Department of Education Faculty profiles and provides evidence of their capacity to support Ph.D. candidates in the six areas of expertise that the Ph.D. in Education program will emphasize. Ed.D. and Ph.D. committee chairs must be approved to serve by the Dean of the College of Education and Health and Human Development. Evaluation of faculty qualifications to serve as doctoral committee chairs will be based on their disciplinary content knowledge, research, skills, prior committee experience and program knowledge. Tables 4, 5 & 6 present a list of the Department of Education faculty and their specific areas of expertise.

We expect the Ph.D. program in Education to strengthen our current undergraduate program. Recruiting full-time Ph.D. students who have been practitioners in higher education administration and student services, school administration and teachers in public schools will provide our undergraduates with teaching assistants that can offer instruction that ties educational theory to practice. Ph.D. students recruited from the field will provide opportunities to strengthen relationships between Montana State University's Department of Education and educational organizations throughout the state.

Table 4
Curriculum and Instruction Faculty

Curriculum & Instruction Faculty	Degree	Academic Rank	University	Area of Expertise		
				Scholarship	**Teaching**	**Specialized Disciplines**
Michael Brody	Ph.D.	Associate Professor	Cornell	Science Teaching and Learning in Formal and Informal Settings, Environmental Education Assessment, Curriculum Development	Science Teaching and Learning in Formal and Informal Settings, Environmental Education, Assessment, Curriculum Development	STEM Education, Educational Evaluation, Assessment, Research Design and Analysis.
Jioanna Carjuzaa	Ph.D.	Associate Professor	University of Colorado-Boulder	Multicultural Education	Culturally Responsive Pedagogy, Indian Education for All, Linguistic Diversity	Pedagogy & Teacher Preparation
Jayne Downey	Ph.D.	Associate Professor	University of Northern Colorado	Educational Neuroscience, Teaching & Learning, Advanced Pedagogy, Mentoring & Induction	At-Risk Students, Rural Education, Educational Resilience Pre-service Teacher Preparation	Pedagogy & Teacher Preparation, STEM Education, Educational Evaluation, Assessment, Research Design and Analysis.
Ann Ellsworth	Ph.D.	Professor	University of Wisconsin-Madison	Literacy Acquisition and Development/English Language Arts	Literacy pedagogy, literacy across the curriculum	Pedagogy & Teacher Preparation
Ann Ewbank	Ph.D.	Assistant Professor	Arizona State University, College of Education	Library Science Action Research, Mixed Methods Qualitative Research Children's/YA Lit Intro to Doc Studies Technology Integration	Library Science Advocacy/Policy Action Research Technology Integration	Pedagogy & Teacher Preparation, Online and Distance Education Delivery

Table 4 (continued)

Curriculum & Instruction Faculty	Degree	Academic Rank	University	Area of Expertise		
				Scholarship	Teaching	Specialized Discipline
Joyce Herbeck	Ed.D.	Associate Professor	University of Maine	Children's Literature and Young Adult Literature	Critical Literacy and Social Justice Issues in Children's Literature	Pedagogy & Teacher Preparation
Gilbert Kalonde	Ph.D.	Assistant Professor	Southern Illinois University-Carbondale	C & I & Tech. Ed.	Technology for inclusiveness in Teacher Educ.	STEM Education, Pedagogy & Teacher Preparation, Educational Evaluation, Assessment , Research Design and Analysis
Lynn Kelting-Gibson	Ed.D.	Assistant Professor	Montana State University	Classroom Assessment, Teaching Strategies, Curriculum Development	Classroom Assessment, Teacher Authenticity, Historical Curriculum	Pedagogy & Teacher Preparation, Educational Evaluation, Assessment, Research Design and Analysis.
Mary Leonard	Ph.D.	Associate Professor	University of Wisconsin-Madison	Science Education, STEM Education, Educational Psychology, Research Methodologies and Methods, The Learning Sciences/Learning Theories	Conceptual change in science education, Learning and teaching in integrated STEM contexts, Design research, Video sources in research, Model-based inquiry in STEM education	Pedagogy & Teacher Preparation, STEM Education
Priscilla Lund	Ph.D.	Associate Professor	The University of Iowa	Art Education	The relationship between the Arts and STEM education	Pedagogy & Teacher Preparation

Table 4 (continued)

Curriculum & Instruction Faculty	Degree	Academic Rank	University	Area of Expertise		
				Scholarship	Teaching	Specialized Disciplines
Fenqjen Luo	Ph.D.	Assistant Professor	University of Texas at Austin	Math Education	Mathematical thinking and reasoning	Pedagogy & Teacher Preparation, STEM
Nicholas Lux	Ed.D.	Assistant Professor	Boston University	Educational media and technology teaching and research	Mixed-methods research	Pedagogy & Teacher Preparation, Online and Distance Education Delivery, STEM Education
Sarah Schmitt-Wilson	Ph.D.	Teaching Professor	University of Northern Colorado	Educational Psychology, Research Methods, Statistics	Career development of children, adolescents, and young adults from rural communities	Pedagogy & Teacher Preparation, Educational Evaluation, Assessment, Research Design and Analysis
Christine Rogers-Stanton	Ph.D.	Assistant Professor	University of Wyoming	Curriculum & Instruction core & elective coursework, Literacy education, Indigenous education, Social Justice education	Advanced coursework and experience in quantitative and qualitative methodologies, Expertise in critical qualitative/indigenous methodologies, participatory community based research	Pedagogy & Teacher Preparation, Educational Evaluation, Assessment, Research Design and Analysis
Elisabeth Swanwson	Ph.D.	Professor	University of Georgia	Science Education Methods, qualitative research methods	Professional development for higher education faculty and K-12 teachers in STEM disciplines	STEM Education, Online and Distance Educational Delivery

Table 5
Educational Leadership Faculty

Educational Leadership Faculty	Degree	Academic Rank	University	Area of Expertise		
				Scholarship	**Teaching**	**Specialized Discipline**
Art Bangert	Ed.D.	Associate Professor	University of South Dakota	Educational Statistics, Quantitative Research Methods	Instrument Development, Assessment of Online Learning, Student Evaluations of Online Learning,	Education Evaluation, Assessment, Research Design, and Analysis, Online and Distance Education Delivery
David Henderson	Ed.D.	Assistant Professor	The University of Montana	Ed Leadership Masters: Foundations of Leadership, School Law, Schools and Diverse Communities; Ed.D.: Leadership and Organizational Theory, Leading Social Justice	Research into leader identity and integrity resulting in authentic leadership; social justice in leadership; Indigenous identity and leader authenticity; facilitator for Parker Palmer's Circles of Trust	Leadership and Policy Analysis, Pedagogy and Teacher Preparation
William Ruff	Ed.D.	Associate Professor	Arizona State University	Educational Leadership	Qualitative and Indigenous research Methods, organizational leadership theory	Leadership and Policy Analysis, Education Evaluation, Assessment, Research Design, and Analysis,
Tena Versland	Ed.D.	Assistant Professor	Montana State University	Instructional Leadership; School Improvement; Teacher Evaluation	Montana State University	Leadership and Policy Analysis, Education Evaluation, Assessment, Research Design, and Analysis,

Table 6
Adult and Higher Education Faculty

Adult and Higher Education Faculty	Degree	Academic Rank	University	Area of Expertise		
				Scholarship	Teaching	Specialized Disciplines
Carrie Myers	Ph.D.	Associate Professor	Washington State University	Coursework in Adult & Higher Education disciplines, Honorable mention President's excellence in Teaching (2010)	Research foci: (1) faculty issues and institutional context; (2) k20 educational trajectory and higher education outcomes; (3) STEM issues and educational trajectory (4) program evaluation and assessment.,	Leadership and Policy Analysis, K-20 Trajectory, Education Evaluation, Assessment, Research Design, and Analysis, STEM Education
Tricia Seifert	Ph.D.	Assistant Professor	University of Iowa	Quantitative research design and methodology, survey methodology, mixed methodology, coursework in Adult and Higher education disciplines	Effect of experiences and environments on student learning, development and success; the relationship between postsecondary organizational structure and culture with student success; students' educational expectations and transition to postsecondary	Leadership and Policy Analysis, K-20 Trajectory, Education Evaluation, Assessment, Research Design, and Analysis, STEM Education
Sweeny Windchief	Ed.D.	Assistant Professor	University of Utah	Critical Race Theory/Institutional Research/College Student Development/Law and Policy in Higher Education	Indigenous Methodologies in Research/Indigenous Identity/Tribal Colleges/Critical Policy Analysis	Leadership and Policy Analysis, K-20 Trajectory, Education Evaluation, Assessment, Research Design, and Analysis, STEM Education

C. Describe what differentiates this program from other, closely related programs at the institution.
Students who wish to pursue an Ed.D. will be prepared for positions as educational practitioners. The Ph.D. program in Education is intended to prepare candidates to be higher education faculty and advanced researchers. Based on Young (2006) and Summer, Aiken, & Gerstl-Pepin (2013), Table 7 is presented to show how we view MSU's current Ed.D. program in education as differentiated from the newly proposed Ph.D. program in Education.

Table 7
Comparison of Ed.D. and Ph.D. Programs

	Ed.D.	Ph.D.
Primary Career Intention	Administrative leadership in educational institutions or related organizations	Scholarly practice, research, and/or teaching at university, college, institute or educational agency
Degree Objective	Preparation of professional leaders competent in identifying and solving practical and applied problems in education. Emphasis is on developing thoughtful and reflective practitioners	Preparation of professional researchers, scholars, or scholar practitioners competent in identifying and solving complex, multi-faceted problems. Develops competencies in educational scholarship and research that focuses on acquiring new knowledge
Time to Degree	Part-Time Study (5-8 years)	Full-Time Study (4-5 years)
Knowledge Base	Develops and applies knowledge for practice. Research-based content themes and theory are integrated with practice with emphasis on application of knowledge base	Fosters theoretical and conceptual knowledge. Content is investigative in nature with an emphasis on understanding the relationships to leadership practice and policy
Research Methods	Develops an overview and understanding of research including data collection skills for action research, program measurement, and program evaluation; applied research focus asking practical questions	Courses develop an understanding of inquiry, and qualitative and quantitative analysis and research. Develops competencies in educational research design, analysis, synthesis, and writing; theory-driven research questions
Comprehensive Knowledge Assessment	Knowledge and practice portfolios provide evidence of ability to improve practice	Written and oral assessments are used to understand theoretical and conceptual knowledge in the field
Applicant Qualifications	Masters degree in related field with strong academic record + 3 years successful experience in education	Masters degree in related field with strong academic record and potential for scholarly writing and inquiry; research interests compatible with Ph.D. faculty
Capstone	Well-designed applied research of value for informing educational practice	Original research illustrating a mastery of competing theories with the clear goal of informing disciplinary knowledge
Capstone Committee	Committee includes at least one practicing professional in an area of relevance to the candidate's program	Composed primarily of active researchers in areas relevant to students' areas of interests

Note. Young, M.D. (2006). UCEA Review. XLV (2), Summer and Aiken, J.A., & Gerstl-Pepin, C. (2013). Envisioning the Ed.D. and Ph.D. as a partnership for change. *Planning and Changing, 44*(3/4), 168-169

D. How does the proposed program serve to advance the strategic goals of the institution?

The proposed Ph.D. in Education with options in Adult and Higher Education, Educational Leadership, and Curriculum and Instruction addresses several MSU Strategy Plan Goals outlined here (Montana State University's Strategic Plan, 2012, retrieved March 20, 2014 from http://www.montana.edu/strategicplan/).

MSU Learning: *Goal - MSU prepares students to graduate equipped for careers and further education.*

- The Ph.D. program will have a strong research component that requires significant coursework in statistics and research methods, as well as publication and presentation at national conferences. (Reflective of MSU Metric L.2.2)

MSU Discovery: *Goal – MSU will raise its national and international prominence in research, creativity, innovation and scholarly achievement, and thereby fortify the university' standing as one of the nation's leading public research universities*.

- New student enrollment in the Ph.D. program will contribute to the increase in total graduate student population, doctoral student enrollment, and the number of graduate degrees conferred. (Reflective of MSU Metric D.1.3, D.3.1, D.3.2, D.3.3)
- Graduate students in these programs will be required and supported academically to present scholarly projects at regional and national conferences and will be strongly encouraged to publish their work. (Reflective of MSU Metric D.3.4)
- The Ph.D. in Education will strengthen MSU's position among our peers as a Carnegie Very High Research Activity University.
- Montana State University was recently accepted into the Carnegie Project for the Education Doctorate (CPED), a distinction bestowed upon only approximately 60 other Research-oriented universities in the country. This project is designed to assist universities develop cutting-edge curricula that is aligned with the needs of a rapidly changing educational climate; in addition, CPED provides guidance to help universities ensure that their Ph.D. is distinctly different from the Ed.D.
- Education faculty members are productive mentors of graduate students. Over the past 5 years, MSU Department of Education Faculty have graduated 35 students with Ed.D. degrees and have written grant proposals generating over 5 million dollars; throughout the past 4 years, they have co-authored 17 national/international presentations and 16 peer-reviewed publications with graduate students. Based on FY 2014, the Department of Education faculty submitted 12 grants totaling **$2,483,292** with current total awards from eight funded grants of **$1,821,743**. The Department of Education faculty has a 58% success rate for obtaining external funding.

MSU Engagement: *Goal – Members of the Montana State University community will be leaders, scholars and engaged citizens of their local, national, and global communities, working together with community partners to exchange and apply knowledge and resources to improve the human prospect.*

- Opportunities will be provided for MSU staff, faculty, and students to participate in a research focused educational experience, and in leadership development specific to educational settings. (Reflective of MSU Metrics E.3.1, E.3.2)
- Education Ph.D. students will be educated as leaders and will assume leadership roles and responsibilities within the institution and in educational, environmental, and public organizations across the state and country. (Reflective of MSU Metrics E.3.1, E.3.2)

MSU Integration: *Goal - By integrating learning, discovery and engagement, and by working across disciplines, the MSU community will improve the world.*

- Research projects in the Ph.D. program will integrate STEM disciplinary areas, facilitate partnerships with Montana's K-12 schools, and facilitate community-based research designed to improve education in Montana and beyond. (Reflective of MSU Metric I.1.1)

- Graduate students in these programs will be required and supported academically to present scholarly projects at regional and national conferences and will be strongly encouraged to publish their work in collaboration with faculty. (Reflective of MSU Metric I.1.4)
- The interdisciplinary nature of the Ph.D. will ensure that research and creative projects cross college and departmental boundaries. (Reflective of MSU Metric I.2.2)

MSU Access: *Goal – Montana State University is committed to widening access to higher education and ensuring equality of opportunity of all.*

- The essence of the proposed program is to provide an accessible academic pathway to graduate education for practicing administrators, educators, and educational researchers in the state of Montana and across the nation. (Reflective of Metrics A.1.3, A.1.4, A.1.7)

E. Describe the relationship between the proposed program and any similar programs within the Montana University System. In cases of substantial duplication, explain the need for the proposed program at an additional institution. Describe any efforts that were made to collaborate with these similar programs; and if no efforts were made, explain why. If articulation or transfer agreements have been developed for the substantially duplicated programs, please include the agreement(s) as part of the documentation

Although the University of Montana offers an Ed.D., there are no Ph.D. programs in Education across the MUS system. In addition, MSU currently offers the only terminal degree (Ed.D.) in the state in Adult and Higher Education. This proposal is the first in Montana seeking to establish a Ph.D. in with options in Adult and Higher Education, Educational Leadership, and Curriculum and Instruction. We would welcome partnering with other institutions, but no other institutions have put forth a similar proposal. As the largest producer of K-12 teachers in the state, and a very large producer of graduate students at MSU and within Montana, it is logical that we are the first to request the development of this Ph.D. program.

5. Program Details

A. Provide a detailed description of the proposed curriculum. Where possible, present the information in the form intended to appear in the catalog or other publications. NOTE: In the case of two-year degree programs and certificates of applied science, the curriculum should include enough detail to determine if the characteristics set out in Regents' Policy 301.12 have been met.

The proposed curricula of the Ph.D. options of Adult and Higher Education, Educational Leadership, and Curriculum and Instruction meet several anticipated needs as outlined in Figure 1.

Figure 1. Ph.D. in Education program outline.

Justification for Ph.D. Education

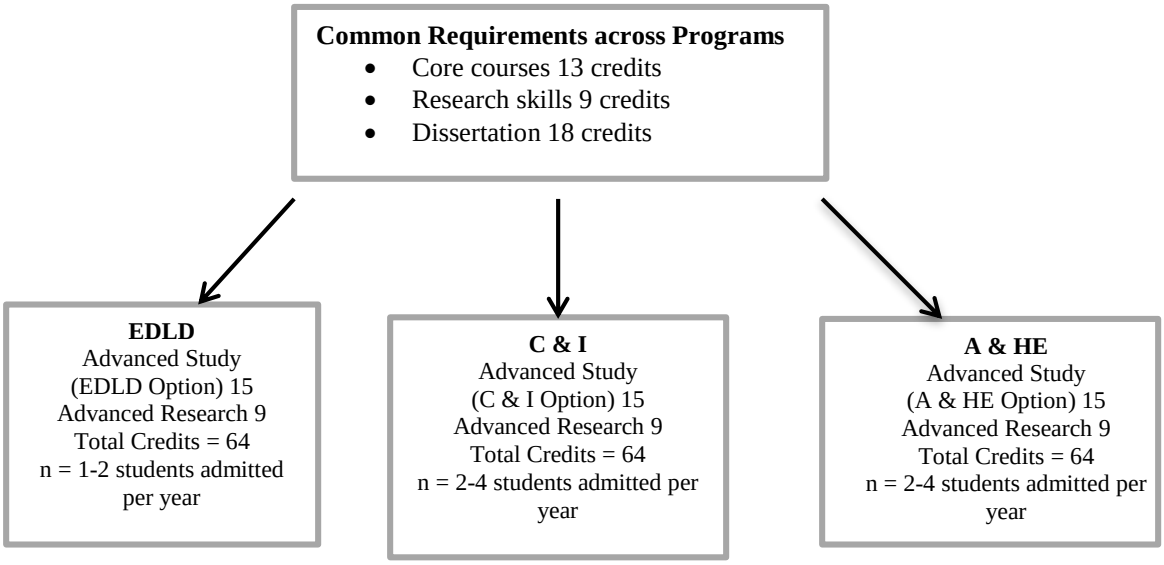
Need:

- Greater research connectivity across disciplines- more opportunity for interdisciplinary research
- Preparing future scholars and researchers for higher education, research-based organization
- Need to conduct top quality research to address negative, non-scientific attacks on education
- Need to train graduates to conduct research examining the effectiveness of the Common Core, the new science standards, and the Smarter Balanced assessment (all of which are adopted by K-12 Montana schools)
- Need to develop valid and reliable measures for CAEP accreditation of educator preparation programs and assess the impact of teacher preparation programs on teacher/administrator success
- Only Ph.D. in Education program in the state

Strategic Plan Support:

- Elevate the research excellence and recognition of MSU faculty
  - By 2019, MSU will improve its rank among Carnegie Classified Research Universities
- Increase graduation rates at MSU
  - By 2019, the number of doctoral degrees awarded will increase from 7 to 11 per year

Ph.D. Program Requirements



Ph.D. candidates must have 64 total credits-beyond the bachelor's degree. Thirty (30) credits may be transferred to the program from MSU or another accredited program, upon approval by the department. The common requirements across the areas of Ph.D. study include 13 Core credits, 15 Specialization credits, 18 Research credits and 18 Dissertation credits for a total of 64 credits for the Ph.D. degree. These courses are outlined in Table 8 below. A large majority (over 85%) of proposed Ph.D. and Ed.D. curriculum core and research courses currently exist. A list of courses available for the Adult and Higher Education specializing in higher education administration or academics is provided in Appendix A. In addition, the Curriculum and Instruction program will collaborate with other MSU colleges to offer specializations in areas such as Curriculum Design, English/Language Arts, Social Studies Education, and Science Education. (See Appendix B)

Table 8

Ph.D. in Education Coursework

Core (13 Credits)		
Choose 3 Courses (9 credits)		
EDLD 505 History and Philosophy of Higher Education (3)		
EDLD 643 Leading Social Justice (3)		
EDLD 610 Educational Leadership and Organization Theory (3)		
EDLD 530 College Teaching (3)		
EDCI 508 Advanced Ed Psychology (3)		
Required Courses (4 credits)		
EDCI 594 Dissertation Seminar (1)		
EDLD 6XX Doctoral Seminar (3)		
Options (15 Credits)		
Adult & Higher Education (15cr)	**Educational Leadership (15cr)**	**Curriculum & Instruction (15cr)**
EDU 505 History/Philosophy HE (3)	EDLD 620 School Supt. (3)	Electives appropriate to area of specialization (Curriculum Design; English Language Arts Education; Social Studies Education; Science Education) & approved by Graduate Advisor See Appendix B
EDLD 510 Org/Admin of HE (3)	EDLD 630 Adv. Inst. Leadership (3)	
EDLD 528 College Students (3)	EDLD 645 Personnel Mgmt.(3)	
EDLD 537 Institutional Research/Assessment (3)	EDLD 650 Adv. Montana Finance/Facilities (3)	
Electives appropriate to area of specialization (Academics or Administration) & approved by Graduate Advisor See Appendix A	EDLD 655 Adv. Montana Law/Policy (3)	
	EDLD 657 Educational Policy/Politics (3)	
	EDLD 6XX Ethical Leadership (3)	
	EDLD 6XX School Systems, School Improvement Research (3)	
Research (18 Credits)		
Required (9 credits)		
EDCI 502 Statistics II (3)		
EDCI 607 Qualitative Research Methods (3)		
EDCI 507 Quantitative Research Method (3)		
Advanced Research Electives (9cr)		
EDU 6XX Adv. Qualitative Research (3)		
EDU 6XX Adv. Quantitative Research (3)		
EDCI 513 Critical Race Theory (3)		
EDLD 580 Indigenous Res Methods (3)		
EDLD 537 Institutional Research/Assessment (3)		
EDLD 511 Program Plan/Assessment (3)		
EDU 6XX Ed Measurement (3)		
Dissertation (18 Credits)		
Total: 64		

The anticipated number of new students admitted per year varies among the program areas, with Educational Leadership expecting 1-2 new Ph.D. students, Adult and Higher Education expecting 2-4 and Curriculum and Instruction expecting 2-4 new Ph.D. students. Each student's major professor, will be determined at admission and based on alignment of research interests. The major professor is responsible for guiding the student through the process of writing and defending a written and oral dissertation and a comprehensive examination. Committees, assigned to help the major professor, should consist of a minimum of four MSU faculty members of which two would be faculty members from Education, and a graduate representative.

B. Describe the planned implementation of the proposed program, including estimates of numbers of students at each stage.

Currently, the Department of Education has 104 Ed.D. students (40 in Adult & Higher Education, 31 in Educational Leadership and 33 in Curriculum & Instruction) enrolled in the Ed.D. This equates to 15 full time Ed.D. students and 89 part time Ed.D. students. The vast majority of Ed.D. students are working full time and they do not enroll in courses as full time each semester nor are all 104 Ed.D. students enrolled currently at one time.

The first stage of implementation of the Ph.D. in Education program will begin with admissions. We anticipate that Ph.D. students applying for admission to the new Ph.D. in Education program will need to meet the following admission requirements presented in. Current Ed.D. students desiring to pursue a Ph.D. in Education will have to reapply to the Ph.D. in Education program requirements in Table 9.

Table 9
Ph.D. and Ed.D. Admissions Requirements

Ph.D.	Ed.D
GRE (Verbal 155, Quantitative 150)	Millers Analogy Test (390) or GRE (minimum Verbal 150, Quantitative 145)
Letter or statement of purpose	Personal Essay
Current resume/vita	Current resume/vita
Three years education-related experience	Three years teaching experience-Educational leadership
Three letters of recommendation - one must be from an academic with university affiliation addressing relevant disciplinary knowledge and research skills	Three Professional References (Former employers, supervisors.
Students with a Masters Degree from MSU can use a maximum of 30 credits toward the Ph.D. in Education. Students with a Masters Degree from another institution may use a maximum of 9 credits toward the Ph.D. in Education.	Students with a Masters Degree from MSU can use a maximum of 30 credits toward the Ed.D. in Education. Students with a Masters Degree from another institution may use a maximum of 9 credits toward the Ed.D. in Education.
Official Transcripts	Official Transcripts
Personal interview (program specific) to assess career goals and appropriate fit with program expectations.	
International Students Language Requirement: **TOEFL** (International Applicants only). Applicants who are not U.S. citizens and not from countries where English is the official language are required to take the Test of English as a Foreign Language and score a minimum 213 (paper version - 550, 80 for the iBT). This requirement is waived if the applicant has earned an undergraduate or graduate degree from an institution in the U.S.	International Students Language Requirement: **TOEFL** (International Applicants only) Applicants who are not U.S. citizens and not from countries where English is the official language are required to take the Test of English as a Foreign Language and score a minimum 213 (paper version - 550, 80 for the iBT). This requirement is waived if the applicant has earned an undergraduate or graduate degree from an institution in the U.S.

6. Resources

A. Will additional faculty resources be required to implement this program? If yes, please describe the need and indicate the plan for meeting this need.

Adjustments to Current Faculty Workloads and Proposed Faculty Lines to Accompany New Program

At present the Ed.D. program is used for both the "scholar-practitioner" and for individuals who seek an academic and research-oriented career path. The Ph.D. program will initially be developed by shifting existing faculty and students into the more appropriate track. As such, the Ph.D. in Education will be developed with existing tenure-track faculty (22 FTE) and 10 full time GTA/GRAs. As the number of Ph.D. students increases, adjustments will be made to faculty workloads and course rotations, and GTA/GRA positions will be shifted from Ed.D. to Ph.D. students with a goal of supporting more full time Ph.D. students.

To determine faculty workload adjustments and proposed faculty lines needed to support the proposed Ph.D.'s, several factors were considered. First, the number of current faculty members engaged in graduate responsibilities was examined. Second, impact on undergraduate programs and third the estimated number of graduate degrees per year was generated.

Currently, the Department of Education has 104 Ed.D. students (40 in Adult & Higher Education, 31 in Educational Leadership and 33 in Curriculum & Instruction). This equates to 15 full time Ed.D. students and 89 part time Ed.D. students. The vast majority of our current Ed.D. students are working full time and they do not enroll as full-time students each semester. There are currently 22 (FTE) Department of Education faculty available to support students enrolled in the both the Ph.D. and Ed.D. programs (see Tables 4, 5, & 6). Our current advising load is approximately 5 students per faculty member (104/22). Research by Hackman & McCarthy (2011) related to educational leadership doctoral programs indicates that nationally, graduate faculty advise an average of five doctoral students during the 1-2 year dissertation stage of their programs of study. We anticipate admitting 10 full-time Ph.D. and 5 full-time Ed.D. students to start the program. Future admissions will be based on availability related to full-time Ph.D./Ed.D. students degree completion and graduation.

We currently have an 80% completion rate for both full-time and part students admitted to the Ed.D. program. Over the past 5 years, our Ed.D. program has graduated an average of 7 doctoral students per year. Table 10 presents projected graduate degrees generated per year after this program is fully implemented. We anticipate graduating approximately 11 doctoral students per year for an increase of 4 doctoral students per year over our average of 7 conferrals per year over the past five years.

Table 10
Estimated Graduate Degrees Generated Per Year After Full Program Implementation (after five years)

	Curriculum & Instruction	Adult and Higher Education	Educational Leadership	Total
Ed.D.	2	2	2	6
Ph.D.	2	2	1	5
Total	4	4	3	11

Program Costs

Table 12 below presents a summary of the total costs associated with the addition of this Ph.D.
Using 5-year doctoral student enrollment projections from Table 10, we anticipate shifting our current/existing funding for 10 GTA/GRAs from Ed.D. students to Ph.D. students. We currently have resources budgeted to support 15 GTA/GRAs. We plan to shift 10 Ed.D. GRA/GTA slots to Ph.D. GRA/GTAs with the remaining 5 slots allocated to Ed.D. students . Ultimately, we will continue to fund 15 doctoral

students, 10 of whom will be Ph.D. students, and 5 of whom will be Ed.D. students. All additional students enrolled in the Ed.D. program will pay their own tuition.

B. Are other additional resources required to ensure the success of the proposed program? If yes, please describe the need and indicate the plan for meeting this need.

Research Commons

Additional resources are being requested to establish a Research Commons to support faculty and graduate student research. The Research Commons infrastructure will be comprised of the following six research cores: (1) Leadership and Policy Analysis (2) STEM Education, (3) the K-20 Trajectory, (4) Online and Distance Education Delivery, (5) Pedagogy and Teacher Preparation, and (6) Education Evaluation, Assessment, Research Design and Analysis. These research cores combine the three Ph.D. graduate concentrations by targeting topics that overlap among the programs creating a more unified Ph.D. in Education (see Table 11) The Research Commons will enable us to recruit and support faculty and graduate students, create a network of interdisciplinary researchers to collaborate and support one another, ensure quality of dissertation and research products, and increase efficiency of support by pooling resources across the three Ph.D. areas of concentration. The synergy of these components will result in the establishment of a solid foundation for the expansion of interdisciplinary research across campus. Importantly, these efforts will foster the career development of graduate students and create a pipeline of new researchers with interest and expertise in important and contemporary educational issues across disciplines.

This Research Commons will foster the development of both faculty and graduate student researchers so that funding and infrastructure resources are available at the critical juncture in these researchers' careers when they most need resources and guidance in their development as independent researchers. With this infrastructure in place, we will be poised to expand and strengthen the Research Commons to establish a scalable and sustainable research enterprise for MSU.

In addition to supporting student and faculty research efforts, the Research Commons will be designed to provide support for academic writing and professional development for online and distance delivery for core faculty. The Department of Education will collaborate with its library liaison to ensure that journals and other resources are available to support the Research Commons efforts. We propose that faculty will rotate in and out of the Research Commons as part of their workload assignment to support the dissertation process (e.g., guide research design, statistical analysis and technical writing). In addition, we propose that the Research Commons will have a .5 FTE Project Development and Grant Specialist to coordinate student and faculty research efforts and to seek access to internal and external resources to fund the Research Commons enterprise. The .5 FTE Project Development and Grant Specialist for the Research Commons would be funded from current Department of Education resources, the Dean of the College of Education, Health and Human Development, potential partnerships with the other MSU colleges/departments and possible future indirect grant funds.

The responsibilities of the Project Development and Grant Specialist would include:

1. Seek grant funding for designated research areas and support the faculty and Ph.D. GRAs in writing grant proposals.
2. Provide instruction, consultation, and support for faculty and doctoral students regarding cutting-edge research design, data analyses, academic writing, publication, and professional development in educational research and
3. Serve as a resource to Montana's K-12 community and Office of Public Instruction for analyses

and interpretation of student achievement data that would be meaningful/usable to the state, the schools, and the public. For example, the topics OPI is most interested in studying are: a) comparing full time kindergarten to regular kindergarten; b) examining how IEFA is being used and how effective it is; c) the impacts of the 4 day school week; d) which instructional interventions increase achievement for students with Limited English Proficiency

Table 11
Summary of Research Commons Core Features

Core Research Commons Areas
Leadership and Policy Analysis
STEM and Teacher Education
The K-20 Trajectory
Online and Distance Delivery
Pedagogy and Teacher Preparation
Evaluation, Assessment, Research Design and Analysis

The Project Development and Grant Specialist for the Research Commons would be funded from resources across campus that would benefit from partnerships with the Department of Education and from extramural funding. Costs for the Research Commons are presented in Table 12. The salary for the .5 FTE Project Development and Grant Specialist would be $27,000 per year plus 30% for benefits totaling $35,100. This salary cost is covered by facilities and administrative costs from existing grants. In addition, the Research Commons will use one faculty member per semester to support the six research areas. Two faculty, one per semester housed in the Research Commons will require four course replacements each year @ $3500 per course or a total of $14,000. These costs will be split between the Dean office and the Department of Education. Courses replaced for faculty participation will be taught by the experienced and respected adjunct faculty such as Dr. Jim Rimpau, Dr. Steve Nash, Dr. Dawn Silva and Dr. Godfrey Saunders and others. The infrastructure required to support the Research Common would be office space required for 9-10 funded GTA/GRAs (based on new Ph.D. student enrollments each year estimated in Table 12.). In addition, it is estimated that we also would need approximately $5,000 yearly to provide the needed physical resources and support (office space, paper, copying, office assistance, etc.) for 9-10 GTA/GRAs. This estimate is based on $500/student x 10 = $5000

Table 12
Total Program Costs Associated with Ph.D. in Education

Need	Projected Cost	Actual Budgetary Implications
10 existing GTA/GRA positions currently funding Ed.D.	Shift current/existing funding for 10 GTA/GRAs from Ed.D. students to Ph.D. students.	Current funding exists to support 15 GTA/GRAs. 10 Ed.D. GRA/GTA will be shifted to 10 Ph.D. GRA/GTAs slots. The remaining 5 slots allocated to Ed.D. students.
Research Commons • Project Development and Grant Specialist	The salary for the director will be $27,000 per year plus 30% for benefits totaling $$35,000.This salary will be covered by existing Department of Education and EHHD college funding.	This salary will be shared by the Department of Education and EHHD College existing funding.
• Faculty Rotation	Four course replacements each year @ $3500 per course is $14,000.	These costs will be split between the Department of Education and the College of EHHD using existing funding.
• Infrastructure	Physical resources and support (office space, paper, copying, office assistance, etc.) for 9-10 GTA/GRAs. This estimate is based on $500/student x 10 = $5000.	Costs will be shared by the Department of Education and College of EHHD's existing funding

Projected Revenues

Based on FY 2014, the Department of Education faculty submitted 12 grants totaling **$2,483,292** with current total awards from eight funded grants of **$1,821,743**. The Department of Education faculty has a 58% success rate for obtaining external funding and is positioned to fund the costs of the Ph.D. program through grants and contracts

7. Assessment

The assessment strategies and plan focus on four major goals for the proposed program. These goals include the following:

1. Recruit, support, retain and graduate Ph.D. students in Adult and Higher Education, Educational Leadership, and Curriculum and Instruction.
2. Provide a positive, effective, and scientifically rigorous academic curricula and informal learning experiences to prepare the graduates for long-term success as researchers in education.

3. Decrease the time to degree completion by assessing benchmarks and maintaining progress towards degree.
4. Position students for competitive, scholarly careers in education by providing access to high quality data sources, research support and experiences to conduct research and dissertation.

Assessments will consist of mixed methods analyses (e.g., qualitative and quantitative).
The following questions will guide our assessment strategies and are based on the specific goals of the initiative.

- First, are the recruitment and retention efforts of quality graduate students effective? That is, do our efforts reach an appropriate target audience and accurately reflect whether the goals and expectations of the recruits and participants are consistent with program expectations?
- Second, do the curricular experiences provide positive, effective, and scientifically rigorous academic experiences that prepare the students for long-term success in research careers in education? How do the academic experiences and mentoring interactions lead to the students' development of marketable research skills (e.g., critical thinking, conference presentations, academic writing, and research practices)? Do the academic and mentoring experiences increase scholarly products (e.g., conference presentations, peer-reviewed publications, extramural funding)?
- Third, what scholarly and research based practices and understandings do the students contribute to their professions? Are the graduates of this program well-positioned and competitive for professional and academic careers in education?
- Fourth, does the academic experience lead to a timely progress-to-degree for the students? If so, what factors contribute to timely degree completion? If not, what factors contribute to student difficulties and how can we remedy these factors?
- Fifth, how does the Research Common support student and faculty research? To what extent does the Research Common support interdisciplinary research? Do the students and faculty have access to high quality research sources in which to support their research?

The assessment plan focuses on collecting qualitative and quantitative data using three main data types: baseline, formative, and outcome-based. Collecting the aforementioned data is crucial for both the program and the students to achieve significant success in meeting the four broad goals identified above. In this way, the assessment of the program becomes a programmatic element in itself. Baseline data on initial background and academic characteristics will be collected to identify factors that contribute to the following outcomes among recruited students: (a) prior experiences and productivity in research, (b) participation in activities that enhance research development, (c) access to activities to enhance research skills, and (d) long term success and trajectories in research careers in education. Specific **outcomes measured** will include scholarly products, research and assessment collaborations, awards and honors, presentations and training and development opportunities. Likewise, **formative data** will be collected and analyzed for each benchmark activity to ensure processes are on-target and achieving the broader program goals. These activities include mentoring, academic experiences, collaborative research and assessment projects, infusion of scholarly projects, and **research conferences**. A **summative outcome-based evaluation** will be conducted each year to understand the comprehensive contexts that contribute to the success and progress of the students and the program. Specifically, we plan to examine how the academic experiences and various constituents help the program and the students achieve the intended outcomes. Evaluation methods include (a) entrance, formative, and exit surveys, (b) focus groups, (c) institutional records, (d) performance measures, and (e) qualitative data collection/assessment techniques. The evaluation methods target students, mentors, all key program personnel, and curricula. This evaluation plan guarantees a high level of transparency and awareness that permits the program to

successfully monitor the effectiveness of activities in enhancing the students' productivity and their progress towards degree completion. Table 13 summarizes our proposed student assessment plan.

Table 13: *Student Assessment Plan*

Benchmarks	**1st**	**2nd**	**3rd**	**4th**	**5th**
Coursework and degree completion	Complete any prerequisite courses Start core courses	Complete core courses	Begin research core	Complete coursework	Dissertation credits and committee review
Academics	Examine educational resources (library, state and government reports, non-profit, etc.)	Join academic writing group	Complete State of Understanding Topic paper	Complete empirically based project	Continued engagement with scholarly literature
Dissertation	Form dissertation committee and draft POS	Submit Program of Study (3rd semester)	Pilot work on dissertation	Complete comprehensive exams Dissertation proposal defense	Progress on/ or completion of dissertation
Build a scholarly profile	Present research locally	Present research locally and regionally	Present research locally and regionally	Present research at a national scholarly conference	Present research at a national scholarly conference
Professionalism	Join appropriate state, regional, national, or international organizations	Engage in the professional community: chair conference sessions, proposal review, volunteer at conferences	Participate in collaborative scholarship with research team or faculty	Participate in collaborative scholarship with research team or faculty	Submit scholarship to a peer-reviewed journal
Awards and Recognition	Explore fellowship, grant, and scholarship opportunities	Explore fellowship, grant, and scholarship opportunities	Apply for at least one grant, award or recognition	Apply for at least one grant, award or recognition	Apply for at least one grant, award or recognition

8. Process Leading to Submission

Describe the process of developing and approving the proposed program. Indicate, where appropriate, involvement by faculty, students, community members, potential employers, accrediting agencies, etc.

Faculty initially decided to develop a Ph.D. in Education as a result of requests from current Ed.D. students wishing to pursue a Ph.D. instead. In addition, faculty became aware of the Carnegie Project on the Education Doctorate (CPED) and wanted to use the experience of other programs to move this proposal forward.

The committee met for one academic year to develop the Ph.D. in Education proposal. The graduate program coordinators from Educational Leadership, Adult and Higher Education, Curriculum and Instruction met weekly during 2013-2014 to develop the Ph.D. in Education proposal. Efforts of the committee members included conducting needs assessments, research in the areas of Ph.D. and Ed.D. programs, and exploration of current trends in graduate education and related discussions. Input from current and potential future students was also solicited to assist with the design of the Ph.D. in Education program. The background work included a review of existing and new Ph.D. and Ed.D. programs at peer institutions and review of the national literature (e.g., Carnegie Foundation for the Education Doctorate, Harvard University and American Educational Research Association) that calls for the differentiation of Ph.D. and Ed.D. programs. The draft proposal was reviewed multiple times by Department of Education faculty and feedback was obtained for consideration in making additional revisions to this draft proposal. Finally, the draft Ph.D. in Education Proposal was reviewed externally by Dr. Jill Perry, Executive Director for the Carnegie Project on the Education Doctorate.

Once the Department of Education faculty reviewed the Ph.D. in Education proposal, it was further reviewed by Jayne Downey, Chair of the Department of Education and Associate Dean of EHHD, Lynda Ransdell, Dean of the College of EHHD and Karlene Hoo, the MSU Graduate School Dean. Based on feedback from the department, college and graduate school administration, the proposal was further revised and submitted to the MSU University Graduate Council for consideration. Once the proposal was reviewed by the Graduate Council, it was then reviewed by the Faculty Senate's Academic Programs Working Group and then voted on by the MSU Faculty Senate. As recommended by Aiken & Gerstl-Pipin (2013), we will convene a Doctoral Advisory Committee (DAC) to guide the program through initial development and implementation.

References

Aiken, J.A., & Gerstl-Pepin, C. (2013). Envisioning the Ed.D. and Ph.D. as a partnership for change. *Planning and Changing, 44*(3/4), 162-180.

Bousquet, M & Nelson, C. (2008). How the university works: Higher education and the low-wage nation (Cultural Front). New York, NY: NYU Press.

Carnegie Project on the Education Doctorate (2012). About CPED. Retrieved from http://cpedinitiative.org/about

Hackman, D.G. & McCarthy, M.M. (2011). At a crossroads: The educational leadership professoriate in the 21st century. Charlotte, NC: Information Age Publishing.

Nelson, J.K., & Coorough, C. (1994). Content analysis of the Ph.D. versus Ed.D. dissertation. *The Journal of Experiential Education, 62,* 158-168.

Redden, E. (2010). Envisioning a new Ed.D. Inside Higher Ed (October 15).

Schulman, L.S., Golde, C.M., Bueschel, A.C., and Garabedian, K.J. (2006). Reclaiming education's doctorates: A critique and a proposal. *Educational Researche*r, April, 25-

Appendix A: Specialization Courses

Adult and Higher Ed Specialization (3 credits from the following list)

Electives:

- EDLD 509 Issues and Trends in Higher Education (3 credits)
- EDLD 512 Finance and Administration in Higher Education (3 credits)
- EDLD 513 Resource and Program Management (3 credits)
- EDLD 529 Post Secondary Distance Delivered Education (3 credits)
- EDLD 530 College Teaching (3 credits)
- EDLD 531 Theoretical Foundations of Student Services (3 credits)
- EDLD 533 Law and Policy in Higher Education (3 credits)
- EDLD 535 Student Services (3 credits)
- NAS 523 American Indians and Minorities in Higher Education (3 credits)

Appendix B: Examples of Possible Electives for C& I Specialization

Curriculum Design

EDCI 504 Assessment and Evaluation in Education (3)
EDCI 520 Visual Arts and Learning (3)
EDCI 532 General School Curriculum (3)
EDCI 533 Middle Years School (3)
EDCI 536 Construction of Curriculum (3)
EDCI 540 Amer Indian Studies for Ed (3)
EDCI 541 History & Philosophy of Ed (3)
EDCI 542 Creative Processes in Education (3)
EDCI 544 Phil Issues in Ed (3)
EDCI 551 Education Technology: Teaching, Learning, and Leadership (3)
EDCI 591 Special Topics (3)
EDCI 592 Independent Study (3)
EDCI 598 Internship (3)

English Language Arts Education

EDCI 512 Writing and Its Improvement (3)
EDCI 514 Mentoring New Teachers (3)
EDCI 534 Literacy Assessment and Instruction (3)
EDCI 540 Amer Indian Studies for Ed (3)
EDCI 549 Applications of Literature for Children and Young Adults (3)
EDCI 551 Education Technology: Teaching, Learning, and Leadership (3)
EDCI 591 Special Topics (3)
EDCI 592 Independent Study (3)
EDCI 598 Internship (3)
ENGL 510 Studies In Critical Theory (3)
ENGL 520 Pedagogy Theory & Practice (3)
ENGL 530 Writing Theory And Practice (3)
ENGL 540 Literary History (3)
ENGL 550 Focused Research Seminar (3)

Social Studies Education

EDCI 510 Issues and Trends in Social Studies Instruction (3)
EDCI 514 Mentoring New Teachers (3)
EDCI 540 Amer Indian Studies for Ed (3)
EDCI 551 Education Technology: Teaching, Learning, and Leadership (3)

EDCI 591 Special Topics (3)
EDCI 592 Independent Study (3)
EDCI 598 Internship (3)
HIST 502 Public History(3)
HIST 503 History Of America Before 1860 (3)
HIST 504 Topics In Environmental History (3)
HIST 505 U.S. History 1860 To Present (3)
HIST 506 Topics In History Of Science, Technology & Society (3)
HIST 507 Historical Writing (3)
HIST 512 Topics In World History (3)
HIST 513 Topics In Social And Cultural History (3)
HIST 515 The American West(3)
HIST 540 Historical Methods (3)
NASX 505 Proseminar In Native American Studies (3)
NASX 520 Feminist And Gender Theories In Native American Studies (3)
NASX 521 Tribal Government: Yesterday And Today (3)
NASX 523 American Indians And Minorities In Higher Education (3)
NASX 524 Contemporary Issues In American Indian Studies (3)
NASX 525 Indigenous Philosophies Of Sacred Ecologies (3)
NASX 530 Federal Law And Indian Policy (3)
NASX 540 Theoretical Positions In Native American Studies (3)
NASX 541 A Critical Approach To NAS Methodologies (3)
NASX 550 Native America: Dispelling The Myths (3)
NASX 551 American Indian Art Survey (3)
NASX 552 Indigenous Nations Of Montana (3)
NASX 560 Native American Literary Traditions (3)

Science Education

Biology

BIOE 513 Terrestrial Ecology of Plains and Prairies (3)
BIOE 516 Terrestrial Ecology of the Northern Rocky Mountains (3)
BIOE 519 Biology of Riparian Zones and Wetlands (3)
BIOE 520 Understanding & Managing Animal Biodiversity in YNP (3)
BIOE 522 Birds of Prey of the Greater Yellowstone Ecosystem (3)
BIOE 523 Wildlife Ecology of the Northern Rocky Mountains (3)

Chemistry and Biochemistry

CHMY 500 Science Lab Safety and Risk Management (3)
CHMY 505 Critical Concepts in Chemistry (3)
CHMY 506 Integrating Computers into Laboratory Instruction (3)

Earth Science

ERTH 594 Seminar: Field Geology (3)
ERTH 512 Mountains and Plains Riparian Processes (3)
ERTH 516 Northern Rocky Mountain Geology (3)
ERTH 517 Electronic Hydrology (3)
GEO 521 Dinosaur Paleontology of Hell Creek Formation (3)
GEO 522 Dinosaur Paleontology II (3)
GEO 560 Geology of the Yellowstone Volcanic Center (3)

Science Education
EDCI 501 Inquiry Through Science and Engineering Practices (3)
EDCI 514 Mentoring New Teachers (3)
EDCI 518 Master Teaching Strategies for the Science Teachers (3)
EDCI 525 Improvement of Instruction in Science (3)
EDCI 537 Contemporary Issues in Science Education (3)
EDCI 540 American Indian Studies for Ed (3)
EDCI 551 Education Technology: Teaching, Learning, and Leadership (3)
EDCI 591 Special Topics (3)
EDCI 592 Independent Study (3)
EDCI 598 Internship (3)

Electrical Engineering
EELE 591 Solar Cell Basics for Science Teachers (3)

Geography
GEOG 591 Global Warming, Climate Change, and Our Environment (3)

Land Resources and Environmental Sciences
LRES 557 Thermal Biology in Yellowstone National Park (3)
LRES 569 Ecology of Invasive Plants (3)

Microbiology
MB 536 Exploring Microbiology (3)
MB 538 Cell and Molecular Biology (3)
MB 539 Infection and Immunity (3)
MB 540 Applied Environmental Microbiology (3)
MB 541 Microbial Genetics (3)
MB 542 Microbial Ecology (3)
MB 547 Thermal Biology in Yellowstone National Park (3)

Plant Sciences
PSPP 548 Flowering Plants of the Northern Rocky Mountains (3)

Physics
PHSX 511 Astronomy for Teachers (3)
PHSX 512 General Relativity (3)
PHSX 513 Demystifying Quantum Mechanics (3)
PHSX 514 Comparative Planetology (3)
PHSX 582 Astrobiology for Teachers (3)
PHSX 583 Invisible Universe: Search for Astronomical Origin (3)

Range Science
ARNR 529 Yellowstone Range Ecology (3)

November 20-21, 2014

ITEM 165-1009-R1114

Request for authorization to establish a Center for Children, Families and Workforce Development

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THAT

The Board of Regents of Higher Education authorizes the University of Montana-Missoula to create the Center for Children, Families and Workforce Development.

EXPLANATION

The University of Montana-Missoula requests authorization to create the Center for Children, Families, and Workforce Development (CCFWD). The purpose of the CCFWD will be to improve the delivery of social, mental health, and health-related services to Montana's high-risk children and families. By capitalizing on accomplishments that have occurred during the University of Montana's Child Welfare Training Partnership 15 year collaboration with Montana's Department of Public Health and Human Services - Child and Family Services Division, tribal, and private organizations serving families and children, the CCFWD will promote child well-being, strengthen families, and enhance services provided by the organizations and professionals serving them.

ATTACHMENTS

Level II Request Form

Curriculum Proposal

Attachment #1: Letter of Support from Richard VandenPol

Attachment #2: Center Chart

Montana Board of Regents

LEVEL II REQUEST FORM

Item Number: **165-1009-R1114** Meeting Date: **November 20-21, 2014**

Institution: **University of Montana** CIP Code:

Program Title: **Center for Children, Families, and Workforce Development**

Level II proposals require approval by the Board of Regents.

Level II action requested ***(place an X for all that apply and submit with completed Curriculum Proposals Form):***

Level II proposals entail substantive additions to, alterations in, or termination of programs, structures, or administrative or academic entities typically characterized by the (a) addition, reassignment, or elimination of personnel, facilities, or courses of instruction; (b) rearrangement of budgets, cost centers, funding sources; and (c) changes which by implication could impact other campuses within the Montana University System and community colleges. Board policy 303.1 indicates the curricular proposals in this category:

___ **1. Change names of degrees (e.g. from B.A. to B.F.A.)**

___ **2. Implement a new minor or certificate where there is no major or no option in a major;**

___ **3. Establish new degrees and add majors to existing degrees; and**

X 4. Any other changes in governance and organization as described in Board of Regents' Policy 218, such as formation, elimination or consolidation of a college, division, school, department, institute, bureau, center, station, laboratory, or similar unit.

Specify Request:

Montana's human service industry is one of the state's largest employers. Public, tribal, and private organizations that serve high-risk children and families constitute one of the largest employers within the human service industry by providing services to prevent and treat child abuse and neglect; provide specialized foster care, mental health, and educational services; offer short and long-term residential care; and provide housing, medical, and nutritional services. Employees hired to work in organizations that provide these specialized services, however, often possess few of the professional skills needed to effectively perform their responsibilities and possess academic degrees (e.g., psychology, sociology, geography) in disciplines that provide an inconsistent array of knowledge and few skills that directly apply to the responsibilities they are expected to perform. The dissimilar academic training often results in a wide range of personal perspectives, values, ethics, and skills being performed in positions that require a much different set of professional behaviors. A workforce with incomplete knowledge and limited skills challenge employing organizations whose funders (e.g., taxpayers, foundations) expect that the problems associated with abuse, neglect, suicide, delinquency, and drug dependence be prevented and that the children, youth, and families impacted by these problems are effectively treated. Unfortunately, budget restrictions, high turnover rates, and limited training opportunities constrain the organizations' capacities to train employees to assure they possess the knowledge and skills needed to effectively perform their responsibilities and to achieve positive outcomes.

Montana Board of Regents

LEVEL II REQUEST FORM

The University of Montana School of Social Work's Child Welfare Training Partnership (CWTP) has been working with public, tribal, and private organizations for 15 years to address workforce concerns common in human service organizations that serve high-risk children and families. By expanding its current services and changing its name to the Center for Children, Families, and Workforce Development the center will enhance the delivery of services to high-risk children, families, and organizations in Montana through:

1) *Workforce development* and training that provides organizations and employees with specifically tailored curricula that promotes competencies specific to working with high-risk children and families;

2) *Research* that is led by UM faculty and engages students and relevant stakeholders in evaluating programs and services and using data to improve organizational fidelity and outcomes;

3) *Community development* that involves working with local leaders and concerned citizens to create community-based programs and services and develop plans that address problems specific to high-risk children and families (e.g., child abuse prevention, suicide);

4) *Advocacy* that is designed to improve outcomes for children and families by creating policies and services that are informed by empirical evidence and nationally recognized best practices.

Montana Board of Regents

CURRICULUM PROPOSALS

1. Overview

The University of Montana proposes the Center for Children, Families, and Workforce Development (CCFWD) to improve the delivery of social, mental health, and health-related services to Montana's high-risk children and families. By capitalizing on accomplishments that have occurred during the University of Montana's Child Welfare Training Partnership (CWTP) 15 year collaboration with Montana's Department of Public Health and Human Services - Child and Family Services Division (CFSD), tribal, and private organizations serving families and children, the CCFWD will promote child well-being, strengthen families, and enhance services provided by the organizations and professionals serving them. Transitioning from a partnership to a Center is an important next step in the organization's evolution and will accomplish the following goals: 1) consolidate a wide range of expertise and program services under one organizational structure; 2) improve the visibility and credibility of current and future services, solidifying well-established relationships and creating opportunities for new endeavors; and 3) build infrastructure that will improve opportunities to obtain additional extramural funding.

The Center will be housed and administered within the College of Health Profession and Biomedical Sciences (CHPBS) and located in the School of Social Work. The Center will utilize the expertise of campus partners and offer diverse interdisciplinary learning opportunities to address problems specific to Montana's at-risk children and families. These partners include the School of Social Work, the Institute for Educational Research and Service - National Native Children's Trauma Center, Neural Injury Center, departments of counselor education and psychology, Montana Kid's Count, and the recently approved Montana State University Center for Mental Health Research and Recovery.

2. Provide a one paragraph description of the proposed program. Be specific about what degree, major, minor or option is sought.

The Center will improve the delivery of social services and translate current research and best practices to advance the services being delivered to Montana's at-risk children and families. The Center will concentrate its efforts in four specific areas that include:

(1) Workforce development - training curricula will be customized to ensure that frontline staff and managers who work with children, youth, and families receive the skills, knowledge, and professional behaviors needed to improve their ability to perform their respective responsibilities. Workforce studies, technical assistance, and consultation will be provided to social service organizations to address problems associated with organizational culture and climate, administrative leadership, and job satisfaction.

(2) Research - program evaluations and outcome studies will be conducted for public, tribal, and private non-profit organizations and programs that are required to meet specific outcomes and adhere to standards of fidelity. The focus of the research will be applied to optimize immediate benefits to service providers and clients served by partnering agencies.

(3) Community development – Center staff will work with local communities and organizations statewide to promote intervention and prevention programs that help mitigate problems specific to children and families (e.g., child, drug, and alcohol abuse, childhood trauma, family violence, health problems, and mental illness).

(4) Advocacy – The Center will advocate for and shape policies and services that improve services to

Montana Board of Regents
CURRICULUM PROPOSALS

children, youth, and families and that are informed by empirical evidence and nationally recognized best practices.

3. Need

A. To what specific need is the institution responding in developing the proposed program?

Fifteen years ago the Child Welfare Training Partnership responded to workforce problems experienced by Montana's Child and Family Services Division (CFSD) by recruiting students and training new employees to become child protection service (CPS) workers. The need for statewide workforce training has expanded and currently includes CPS workers, social workers, teachers, mental health providers, CASA workers, case managers, and probation officers who work with at-risk children, youth, and families. The Partnership has also responded to an increased number of requests from public, tribal, and private social service agencies to provide translational knowledge and research regarding effective interventions, public policy, and community prevention strategies that serve at-risk children and families. Finally, as agency training budgets shrink, more agencies have requested special topic and web-based workshops to bolster a limited workforce pool and to improve employee competencies.

B. How will students and any other affected constituencies be served by the proposed program?

University of Montana students will continue to have access to courses that provide knowledge and skills in the areas of child abuse and neglect, child and family law, addiction treatment, and juvenile delinquency and mental health prevention and treatment. Undergraduate and graduate students majoring in social work and CFSD employees will continue to receive educational stipends when they contractually agree to enroll in a specific course of study and seek employment with CFSD or tribal social services following graduation. Public, private non-profit, and tribal social service agencies that serve children, youth, and families will have improved access to professional development training, technical assistance, workforce analyses, applied research, evaluation studies, advocacy services, and collaborative partnerships with University of Montana faculty.

C. What is the anticipated demand for the program? How was this determined?

The demand for these services and activities has been well-established during the 15 year partnership between UM's Child Welfare Training Partnership and Montana's Child and Family Service Division. Recent workshops in Billings, Great Falls, Helena, and Miles City have been filled to capacity and resulted in waiting lists, further validating the need for statewide training to improve the competencies of employees in social services. Each year, more public, private, and tribal agencies request services to augment workforce training needs, promote professional development, translate current research to best practices, and advocate for structural and systemic changes.

4. Institutional and System Fit

A. What is the connection between the proposed program and existing programs at the institution?

The Center will continue to collaborate with other University of Montana centers and departments that serve at-risk children and families including the Institute for Educational Research and Service (IERS), the National Native Children's Trauma Center (NNCTC), the Rural Institute, and the

departments of psychology and counselor education. It does, however, have a more concentrated focus on working primarily with social service organizations and addressing problems specific to workforce development and improving organizational practices to improve outcomes for children and families. The Center will continue to collaborate with and utilize the expertise available within these centers and departments.

B. Will approval of the proposed program require changes to any existing programs at the institution? If so, please describe.

The Center will not change existing programs.

C. Describe what differentiates this program from other, closely related programs at the institution (if appropriate).

The Center will direct its services to those social services organizations that work with at-risk children and families. Collaborative relationships with related University of Montana programs and departments have been, and will continue to be critical to building a successful program.

D. How does the proposed program serve to advance the strategic goals of the institution?

The University of Montana's strategic goals will be supported through the Center's plan "to capitalize on its unique strengths to create knowledge, provide an active learning environment for students, and offer programs and services responsive to the needs of Montanans." The University's Strategic Plan for 2020 to strengthen Montana's communities and reinforce core values will be addressed through the activities described below.

Leadership: Discovery and Creativity

- The Center will strengthen existing partnerships with public, tribal, and private organizations, elected leaders, and UM faculty with expertise in children, families, and workforce development. These partnerships will build collaborative potential and evidence-based interventions that improve outcomes for at risk children, youth, and families, and the organizations that serve them.
- The Center will continue to complete workforce studies to identify organizational strengths and areas that need development. Center staff will provide training and technical assistance to improve workplace policies and procedures, leadership, and organizational climate and culture.

Engagement: Partnering for Student Success

- Students will assist in providing technical assistance to partnering organizations. They will have opportunities to interact with faculty members, professionals, and legislators through coursework, internships, practica, and research.
- Graduates employed in organizations serving children and families will have professional development and training opportunities readily available.
- The Center will continue to provide educational stipends and specialized instruction to students who commit to working with children and families.

Diversity: Dynamic Learning Environment

- The College of Health Professions and Biomedical Sciences (CHPBS) has three centers that

emulate the proposed center. The Montana Area Health Education Center, Montana Geriatric Center, and the Native American Center of Excellence provide essential services to citizens who frequently have limited access to health, mental health, and social services. The centers share goals that include increasing workforce recruitment and retention in specific health care and social service areas that are underserved in Montana.

- A focus will be on the disproportionate number of American Indian children in the child welfare system and children living in poverty.
- The Center will utilize the expertise of campus partners and offer diverse interdisciplinary learning opportunities to address problems specific to Montana's children and families. These partners include the School of Social Work, the Institute for Educational Research and Service - National Native Children's Trauma Center, Neural Injury Center, departments of counselor education and psychology, Montana Kid's Count, and Montana State University's recently approved Center for Mental Health Research and Recovery.
- Individual courses, independent studies and advanced research opportunities will be available for UM students to improve the knowledge and competencies needed to effectively work with at risk children, youth, and families.

Sustainability: Education for the Global Century

- The Center will offer its services statewide and collaborate with similar centers housed in schools of social work at Portland State University, University of Minnesota, and University of California – Berkeley.
- The Center will expand its current online courses focused on children and families and continue to provide educational stipends, and field-based experiential learning opportunities to improve workforce training and job placement opportunities.

E. Describe the relationship between the proposed program and any similar programs within the Montana University System. In cases of substantial duplication, explain the need for the proposed program at an additional institution. Describe any efforts that were made to collaborate with these similar programs; and if no efforts were made, explain why. If articulation or transfer agreements have been developed for the substantially duplicated programs, please include the agreement(s) as part of the documentation.

The Center will continue to cooperate with and utilize expertise available in the departments of psychology, sociology, and counselor education and work collaboratively with the Institute for Educational Research and Service - National Native Children's Trauma Center. The Center will also collaborate with MSU's recently approved Center for Mental Health Research and Recovery to maximize resources available through both institutions and to minimize any duplication of services.

5. Program Details

A. Provide a detailed description of the proposed curriculum. Where possible, present the information in the form intended to appear in the catalog or other publications. NOTE: In the case of two-year degree programs and certificates of applied science, the curriculum should include enough detail to determine if the characteristics set out in Regents' Policy 301.12 have been met.

Not applicable

B. Describe the planned implementation of the proposed program, including estimates of numbers of

students at each stage.

The Center will continue to implement the activities and services that have been provided through the partnership for the last 15 years. However, an official introduction of the new center will occur on February 1, 2015 and include each of the following:

February 1, 2015 - an interactive website will be launched providing social service providers and families with web-based resources that address problems specific to high-risk youth and families and the skills and knowledge needed to improve services.

February 1, 2015 - the dates, times, and locations of statewide workshops and webinars will be provided offering professional development opportunities for social service employees and interested families.

On March 1, 2015 - a quarterly meeting of the advisory board will occur between the proposed center and experts providing services across Montana to children and families in public, tribal, and private social service agencies. Advisory board members will be recruited from: Montana Child and Family Services Division, UM's National Native Children's Trauma Center, Intermountain's Children's Home, AWARE, Yellowstone Boys and Girls Ranch, or Youth Homes, Montana's Indian Health Services, Attorney General's Office, Montana Pediatrician's Association, and Casey Family Program.

March 15, 2015 - undergraduate and graduate UM students who are eligible for stipend funding will be recruited, interviewed, and if selected, to enroll in specific courses and agree to be employed with CFSD or tribal social services following graduation. The number of students who enter the stipend program varies each year.

Spring 2015 – research opportunities that directly benefit social service providers will be explored to promote best practices and services.

Summer 2015 – translational research papers will be made available through the website to help practitioners and parents to implement evidence-based interventions and services.

Fall 2015 – additional grant opportunities will be explored to continually improve service delivery statewide.

6. Resources

A. Will additional faculty resources be required to implement this program? If yes, please describe the need and indicate the plan for meeting this need.

Additional faculty resources will not be needed. Adequate federal funding has been provided for 15 years to adequately staff the Child Welfare Training Partnership. A total budget of $1.2 in federal funding has been approved for 2014-2015.

B. Are other, additional resources required to ensure the success of the proposed program? If yes, please describe the need and indicate the plan for meeting this need.

Additional resources are not needed. Extramural funding will be pursued as the program expands its

Montana Board of Regents
CURRICULUM PROPOSALS

services.

7. Assessment

How will the success of the program be measured?

Assessment has been and will continue to be based on the requirements of external funding sources. Traditional outcomes have been focused on the number of students receiving stipend funds, number of professionals attending workshops, and number of workforce analyses conducted. Satisfaction surveys have been implemented for students and workshop attendees. The Center will explore how baseline data can be acquired to measure current outcomes specific to services provided to at risk children and families to determine if the Center's services have longitudinal impacts on those outcomes.

8. Process Leading to Submission

Describe the process of developing and approving the proposed program. Indicate, where appropriate, involvement by faculty, students, community members, potential employers, accrediting agencies, etc.

The Center is the product of the cumulative expertise of social work faculty and child and family service providers throughout the state. The activities that have been completed and are scheduled for 2015 represent careful planning and input from the academic community and professionals who have extensive experience and expertise in delivering services to children, youth, and families. These community-based service providers have recruited and employed UM students for years and will continue to influence which skills and what knowledge is required in these agencies to best meet the needs of at risk children, youth, and families.

National Native Children's Trauma Center

The University of Montana

Institute for Educational Research and Service
The University of Montana-Missoula
32 Campus Drive #6376
Missoula, MT 59812-6376
(406) 243-5344 (406) 243-2197 fax

March 10, 2014

Professor Ryan Tolleson-Knee
Chair, School of Social Work
The University of Montana
Missoula, Montana 59812

Dear Chairperson Tolleson-Knee:

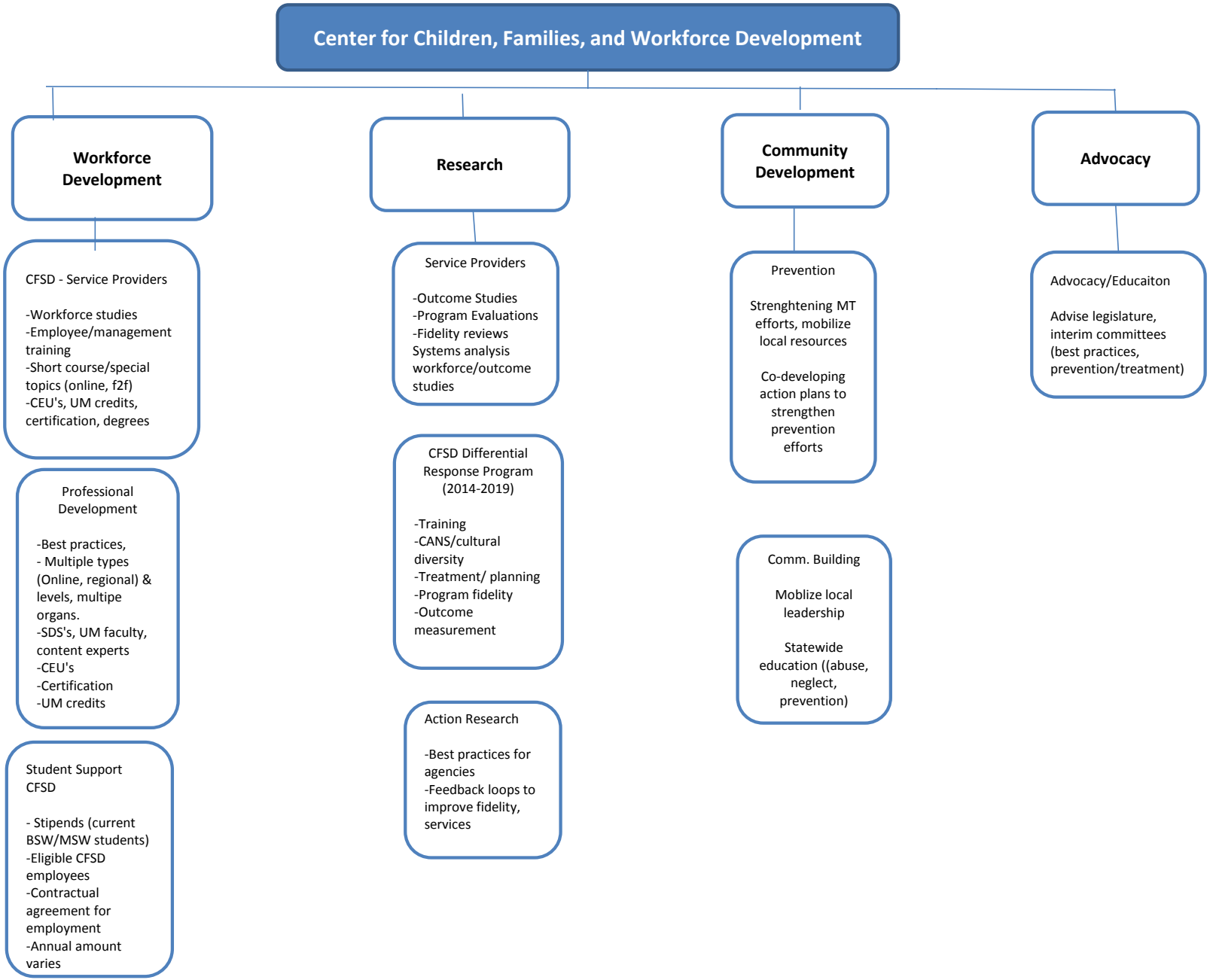
I write in support of the School of Social Work's proposal to establish the Center for Children, Families, and Workforce Development (CCFWD) at the University of Montana (UM). As Director of UM's Institute for Educational Research and Services (IERS) I have encouraged collaboration with the School in multiple ways by: 1) participating in planning sessions with the school's Partnership for Child Welfare Training (CWTP) and the Child and Family Services Division (CFSD) to address improved outcomes for children in foster care placements; 2) working with the school's faculty on grant-funded projects to create trauma informed systems of care, address youth trauma and suicide, and serve as resources to Montana's reservation communities; and 3) hiring graduates from their master's program to work on these and many other IERS projects.

The proposed center capitalizes on an established partnership between your School and IERS by sharing the goal of improving outcomes for high-risk youth. The center's focus on working with families and the social service organizations that serve them offers a new and critical entry point to help meet that goal. Finally, the proposed center deepens a shared commitment to share resources, leverage additional extramural funding, and to promote opportunities for Montana's children and youth.

Institutional approval of the proposed Center will greatly enhance our mutual abilities to attract the strongest possible undergraduate and graduate students, recruit world class teaching and research faculty, and to compete for extramural funding opportunities available through foundations and federal sponsors. As such, your proposed Center has my unequivocal support.

Sincerely,

Richard A. VandenPol, Ph.D., Professor
Principal Investigator, NNCTC and
Director, IERS


Center for Children, Families, and Workforce Development
Workforce Development
Research
Community Development
Advocacy
CFSD - Service Providers
-Workforce studies
-Employee/management training
-Short course/special topics (online, f2f)
-CEU's, UM credits, certification, degrees
Professional Development
-Best practices,
- Multiple types (Online, regional) & levels, multipe organs.
-SDS's, UM faculty, content experts
-CEU's
-Certification
-UM credits
Student Support CFSD
- Stipends (current BSW/MSW students)
-Eligible CFSD employees
-Contractual agreement for employment
-Annual amount varies
Service Providers
-Outcome Studies
-Program Evaluations
-Fidelity reviews
Systems analysis workforce/outcome studies
CFSD Differential Response Program (2014-2019)
-Training
-CANS/cultural diversity
-Treatment/ planning
-Program fidelity
-Outcome measurement
Action Research
-Best practices for agencies
-Feedback loops to improve fidelity, services
Prevention
Strenghtening MT efforts, mobilize local resources
Co-developing action plans to strengthen prevention efforts
Comm. Building
Moblize local leadership
Statewide education ((abuse, neglect, prevention)
Advocacy/Educaiton
Advise legislature, interim committees (best practices, prevention/treatment)

November 20-21, 2014

ITEM 165-1505-R1114

Request to establish a Bachelor of Science Degree in Applied Health and Safety Sciences (AHSS)

THAT

In accordance with Montana University System Policy, the Board of Regents of Higher Education authorizes Montana Tech of The University of Montana to establish a Bachelor of Science Degree in Applied Health and Safety Sciences.

EXPLANATION

Montana Tech's Safety, Health and Industrial Hygiene Department currently confers four degrees: Bachelor of Science In Occupational Safety and Health; Bachelor of Science in Occupational Safety and Health – Applied Health Science option; Master of Science in Industrial Hygiene; and Master of Science in Industrial Hygiene Distance Learning/Professional Track. The Applied Science Accreditation Commission (ASAC) of the Accreditation Board for Engineering and Technology (ABET) recently granted specialized accreditation to the Bachelor of Science Degree in Occupational Safety and Health. However, ABET rules stipulate that an institution may not use the same program name to identify both an ABET accredited program (Occupational Safety and Health) and a non-accredited program (Occupational Safety and Health – Applied Health Science Option) to avoid misleading and confusing the public. Although the two program names are not identical, they are sufficiently alike to mislead and confuse the public and some employers. This request to establish a Bachelor of Science Degree in Applied Health and Safety Sciences satisfies ABET's rule. All resources to support this degree are currently in place because the Applied Health Science option has been offered by Montana Tech for a number of years.

ATTACHMENTS

Level II Request Form
Curriculum Proposal Form

Montana Board of Regents

LEVEL II REQUEST FORM

Item Number: **165-1505-R1114** Meeting Date: **November 20-21, 2014**

Institution: **Montana Tech of The UM** CIP Code: **31.05**

Program Title: **Bachelor of Science Degree in Applied Health and Safety Sciences**

Level II proposals require approval by the Board of Regents.

Level II action requested ***(place an X for all that apply and submit with completed Curriculum Proposals Form):***

Level II proposals entail substantive additions to, alterations in, or termination of programs, structures, or administrative or academic entities typically characterized by the (a) addition, reassignment, or elimination of personnel, facilities, or courses of instruction; (b) rearrangement of budgets, cost centers, funding sources; and (c) changes which by implication could impact other campuses within the Montana University System and community colleges. Board policy 303.1 indicates the curricular proposals in this category:

___ **1. Change names of degrees (e.g. from B.A. to B.F.A.)**

___ **2. Implement a new minor or certificate where there is no major or no option in a major;**

X **3. Establish new degrees and add majors to existing degrees; and**

___ **4. Any other changes in governance and organization as described in Board of Regents' Policy 218, such as formation, elimination or consolidation of a college, division, school, department, institute, bureau, center, station, laboratory, or similar unit.**

Specify Request:

Montana Tech's Safety, Health and Industrial Hygiene Department currently confers four degrees: Bachelor of Science In Occupational Safety and Health; Bachelor of Science in Occupational Safety and Health – Applied Health Science option; Master of Science in Industrial Hygiene; and Master of Science in Industrial Hygiene Distance Learning/Professional Track. The Applied Science Accreditation Commission (ASAC) of the Accreditation Board for Engineering and Technology (ABET) recently granted specialized accreditation to the Bachelor of Science Degree in Occupational Safety and Health. However, ABET rules stipulate that an institution may not use the same program name to identify both an ABET accredited program (Occupational Safety and Health) and a non-accredited program (Occupational Safety and Health – Applied Health Science Option) to avoid misleading and confusing the public. Although the two program names are not identical, they are sufficiently alike to mislead and confuse the public and some employers. This request to establish a Bachelor of Science Degree in Applied Health and Safety Sciences satisfies ABET's stipulation.

Montana Board of Regents

CURRICULUM PROPOSALS

1. Overview

The BS in Occupational Safety and Health (BS OSH) program was recently accredited by the Accreditation Board for Engineering and Technology's (ABET) Applied Science Accreditation Commission (ASAC). ABET's rules stipulate that an institution may not use the same program name to identify both an accredited program and a non-accredited program to avoid misleading and confusing the public. Although the two program names are not identical, they are sufficiently alike to mislead and confuse the public and some employers. Since both the BS OSH and BS OSH-AHS degrees are indicated on a graduate's diploma as BS OSH with no differentiation, it has become necessary to officially separate them to comply with ABET's rule.

2. Provide a one paragraph description of the proposed program. Be specific about what degree, major, minor or option is sought.

To comply with ABET-ASAC's requirement, the SHIH department faculty proposes that the BS OSH-AHS degree be changed from an option under the BS OSH degree to a stand-alone BS degree in Applied Health and Safety Sciences (BS AHSS). This degree is congruent with and would replace the current BS OSH-AHS degree. The BS OSH and BS OSH-AHS degrees have been successful programs at Montana Tech for over thirty and twenty years, respectively.

3. Need

A. To what specific need is the institution responding in developing the proposed program?

The ABET accreditation is important to many Montana Tech programs as an indicator of program quality and rigor. As such, this accreditation attracts both undergraduate and graduate students and is often a factor regarding employment and employer support for pursuing advanced degrees. Once accredited, ongoing compliance is expected, and all accredited programs are periodically scrutinized for reaccreditation. In order to retain the BS OSH ABET-ASAC accreditation, compliance with said conditions regarding degree designation and differentiation is essential.

B. How will students and any other affected constituencies be served by the proposed program?

The proposed name more appropriately highlights the applied health focus of this degree while still retaining the safety aspect that has proven valuable for graduates who enter the occupational safety and health field. An OSH-AHS alumnus that is an SHIH Advisory Board member and health and fitness professional expressed the wish that the degree designation on his diploma, BS in Occupational Safety and Health, more accurately reflected the applied health focus of his degree. Once the degree designation is changed, students will graduate with an autonomous degree that is not an option under another degree and whose title accurately depicts degree emphases. It will lessen confusion and possible misunderstanding among employers, graduate schools, and other entities for which a degree is required.

C. What is the anticipated demand for the program? How was this determined?

The primary need for elevating the BS OSH-AHS program to the autonomous BS AHSS degree is to retain the BS OSH program ABET accreditation, as specified by ABET in the accreditation process. The new degree is a continuation of the long-standing BS OSH-AHS program, and it is assumed that

the demand will continue. The faculty, students, advisory board members, Curriculum Review Committee, and Faculty Senate have all discussed and approve of this change.

4. Institutional and System Fit

A. What is the connection between the proposed program and existing programs at the institution?

The proposed degree is identical to Montana Tech's long-standing BS OSH-AHS degree and will thus retain its position and connection to other Montana Tech and MUS programs and policies. This degree change does not require alterations in any Montana Tech programs, thus no programmatic impacts are anticipated at the institution.

B. Will approval of the proposed program require changes to any existing programs at the institution? If so, please describe.

Within the MUS, this program remains unique--there are no other applied health science degrees or combined safety and applied health science degree programs. Because this is an existing and long-standing program, no adverse consequences exist or are anticipated on existing degrees within the MUS.

C. Describe what differentiates this program from other, closely related programs at the institution (if appropriate).

There are no closely related programs at Montana Tech. While the first two years of the BS OSH and BS AHSS curricula are the same, the upper division classes are quite different other than the select safety and industrial hygiene courses that provide the occupational safety and health focus that distinguishes this program from other applied health programs. The status of the BS AHSS degree as a stand-alone degree with a distinctive and appropriately descriptive name will strengthen its academic position and emphasize the unique educational and employment opportunities possible with the dual focus on both safety and applied health.

D. How does the proposed program serve to advance the strategic goals of the institution?

In alignment with Montana Tech's Strategic Plan Theme 1, Montana Tech is a national leader in education, offering the only occupational safety-focused degrees in the MUS, and one of the only BS degrees in the United States with the distinctive combination of occupational safety and applied health. Evidence of Montana Tech's national reputation for education in occupational safety and health comes from ABET accreditations of three degree programs in OSH and industrial hygiene as well as from annual grant funding of approximately $100,000 from the National Institute for Occupational Safety and Health (NIOSH). The designation of the new AHSS degree will strengthen Montana Tech's credentials for responding to anticipated external funding opportunities from NIOSH's new focus – Total Worker Health. In addition, the differentiation of the two BS OSH degrees supports Strategic Plan Theme 5.c. regarding the external ABET accreditation of the BS OSH. The requirement of the ABET-ASAC accreditation regarding degree differentiation is the driving force behind this request.

E. Describe the relationship between the proposed program and any similar programs within the Montana University System. In cases of substantial duplication, explain the need for the proposed program at an additional institution. Describe any efforts that were made to collaborate with these similar programs; and if no efforts were made, explain why. If articulation or transfer

agreements have been developed for the substantially duplicated programs, please include the agreement(s) as part of the documentation.

There are several Health and Human Performance Degrees at UM-Missoula, UM-Western, MSU-Bozeman, and MSU-Billings. While these programs include some common courses with regard to health and fitness, none include the safety emphasis that distinguishes this degree and broadens professional opportunities for future Montana Tech AHSS graduates.

5. Program Details

A. Provide a detailed description of the proposed curriculum. Where possible, present the information in the form intended to appear in the catalog or other publications. NOTE: In the case of two-year degree programs and certificates of applied science, the curriculum should include enough detail to determine if the characteristics set out in Regents' Policy 301.12 have been met.

The AHSS program emphasizes a unique interdisciplinary approach to safety and health that provides its graduates with diverse employment opportunities in health and fitness, wellness, exercise physiology, occupational safety and health, and more. The curriculum provides a solid foundation of sciences, mathematics, and other basic courses upon which the advanced coursework builds. Upon graduation, students are uniquely educated to comprehensively assess personal health and fitness, promote workplace health programs, start a career in occupational safety and health, and pursue graduate studies in health science programs such as physical therapy, occupational therapy, dentistry, exercise physiology, and industrial hygiene. Graduates of this program that have earned advanced degrees are successful doctors, physical therapists, exercise physiologists, physician's assistants, industrial hygienists, and health and fitness professionals.

B. Describe the planned implementation of the proposed program, including estimates of numbers of students at each stage.

The curriculum of the proposed BS AHSS degree, included herewith as Appendix A, is identical to Montana Tech's current BS OSH-AHS curriculum. The SHIH faculty envision a seamless continuation with sustained and perhaps enhanced program success under the auspices of the SHIH Department, with the only change being in the degree designation and name from BS OSH-AHS option to BS AHSS.

6. Resources

A. Will additional faculty resources be required to implement this program? If yes, please describe the need and indicate the plan for meeting this need.

Since the program will continue without alteration other than its degree status and title, no additional faculty, classes, space, or library resources are required.

B. Are other, additional resources required to ensure the success of the proposed program? If yes, please describe the need and indicate the plan for meeting this need.

Institutionally, updates will be required on the web site, in the catalogue, and in any printed materials. Similar system-wide updates will also be required regarding MUS degree programs, articulation

agreements, and other cooperative and collaborative connections. The SHIH Department and Montana Tech will provide updated information to the appropriate entities.

7. Assessment

How will the success of the program be measured?

Ongoing assessment of the BS AHSS degree will continue as for the BS OSH-AHS degree with regard to curriculum and instruction. We will continue assessing student enrollment, graduation numbers, and placement and expect that they will continue to be steady and perhaps increase with the implementation of a new degree. The 2005-2013 Fall Semester enrollments and degrees awarded for the current BS OSH programs are illustrated in Tables 1 and 2 respectively. This information was retrieved March 12, 2014 from http://www.mtech.edu/about/ir/.

Table 1. 2005-2013 Fall Enrollments for BS OSH Degree Programs

	Fall 2005	Fall 2006	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2011	Fall 2012	Fall 2013	Mean
Applied Health Science Option (proposed AHSS)	**31**	**26**	**18**	**24**	**28**	**32**	**37**	**36**	**26**	**29**
OSH No Option (ABET program)	49	52	53	58	61	56	75	66	70	60

Table 2. 2005-2013 Degrees Awarded for BS OSH Degree Programs

	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	Mean
Applied Health Science Option (proposed AHSS)	**2**	**6**	**7**	**7**	**5**	**4**	**3**	**4**	**8**	**5**
OSH No Option (ABET program)	7	18	14	12	5	2	14	13	6	10

With the proposed degree change, the 'OSH No Option' label on the Montana Tech website would become simply Occupational Safety & Health (OSH). The AHSS degree name would replace 'Applied Health Science Option.' Both degrees have strong and steady numbers that are expected to continue and increase with the increasing demand for degreed safety and health professionals.

8. Process Leading to Submission

Describe the process of developing and approving the proposed program. Indicate, where appropriate, involvement by faculty, students, community members, potential employers, accrediting agencies, etc.

The proposed degree name and status change has been extensively discussed and unanimously agreed upon by the SHIH faculty. The information and justification were provided to and discussed with the

Montana Board of Regents

CURRICULUM PROPOSALS

SHIH Department Advisory Board, which is comprised of alumni and other industry professionals, all of whom are potential employers of our graduates. All recognize the need to comply with ABET-ASAC regarding the BS OSH degree.

In the process of discussing and justifying the need for the BS AHSS degree, the SHIH faculty has come to feel that this change will not only achieve the desired intent regarding ABET accreditation but also upgrade the degree by elevating its status and autonomy and clarifying its focus with a more appropriate title. The SHIH faculty and Advisory Board, the Montana Tech Curriculum Review Committee, and the Faculty Senate have approved the BS AHSS degree.