SUBJECT

Experimental Program to Stimulate Competitive Research (EPSCoR) Annual Summary Report

BACKGROUND/DISCUSSION

Experimental Program to Stimulate Competitive Research (EPSCoR) in Idaho represents a federal-state partnership to enhance the science and engineering research, education, and technology capabilities of states that traditionally have received smaller amounts of federal research and development funds. Through EPSCoR, participating states are building a high-quality, academic research base that is serving as a backbone of a scientific and technological enterprise.

Idaho EPSCoR is currently led by a state committee composed of 16 members with diverse professional backgrounds from both the public and private sectors and from all regions in the state. The Idaho EPSCoR committee oversees the implementation of the EPSCoR program and ensures program goals and objectives are met. The Idaho EPSCoR office and the State of Idaho EPSCoR Project Director are located at the University of Idaho. Partner institutions are Boise State University and Idaho State University.

Dr. Peter Goodwin is the current Idaho EPSCoR Project Director and will be providing a summary report to the Board regarding current EPSCoR activities to include a summary on the NSF EPSCoR funding in Idaho.

STAFF COMMENTS AND RECOMMENDATIONS

Board staff has no comments or recommendations.

BOARD ACTION

This item is for informational purposes only. Any action will be at the Board's discretion.

THIS PAGE LEFT INTENTIONALLY BLANK

Experimental Program to Stimulate Competitive Research (EPSCoR)

Peter Goodwin
Idaho EPSCoR Program Director

Laird Noh
Idaho EPSCoR Committee

Idaho State Bard of Education

Idaho Falls

June 16-17, 2010

Presentation Outline

- Summary
- What is EPSCoR Today?
- Highlights of Current Activities
- Data Management Policy
- Upcoming Priorities

Summary

- Idaho EPSCoR goal is to build the research enterprise, education quality and science community in Idaho.
- Research universities are a cohesive team on RII.
- Engagement of Idaho colleges
- Developing the full intellectual capacity of Idaho
  - STEM pipeline
  - I-CEOST
  - Connectivity with rural communities (i-links and inclusion)
- Upcoming priorities
  - 'America Competes' Act
  - NSF Springboard Day – September 2, 2010
  - Proposal to host national EPSCoR Conference
  - Other EPSCoR major initiatives - USDA

NSF EPSCoR Jurisdictions

1980
Arkansas
Maine
Montana
South Carolina
West Virginia

1985
Alabama
Kentucky
Nevada
North Dakota
Oklahoma
Puerto Rico
Vermont
Wyoming

1987
Idaho
Louisiana
Mississippi
South Dakota

1992
Kansas
Nebraska

2000
Alaska

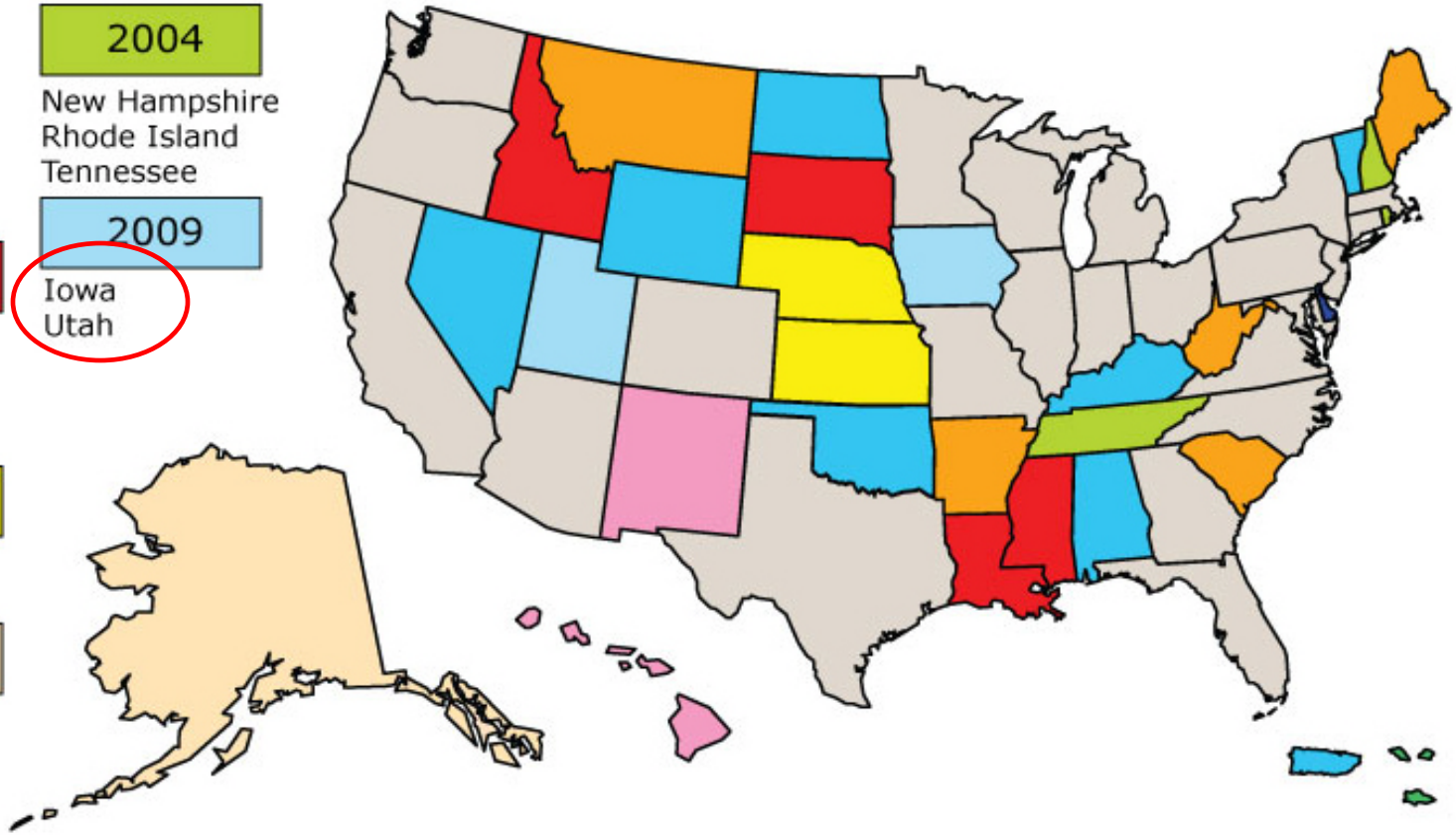
2001
Hawaii
New Mexico

2002
U.S. Virgin Islands

2003
Delaware

2004
New Hampshire
Rhode Island
Tennessee

2009
Iowa
Utah

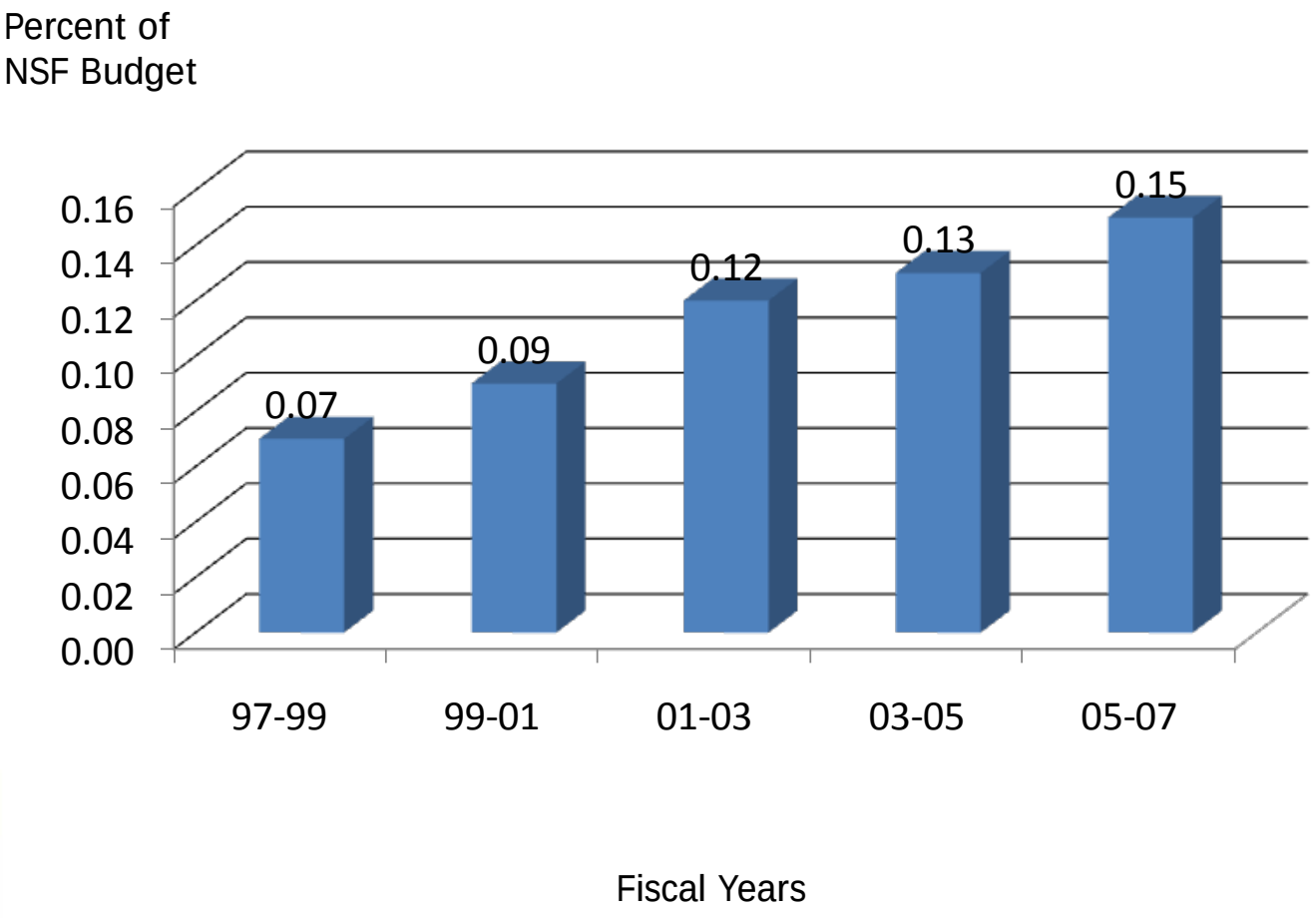


NSF EPSCoR funding to Idaho

- Research Infrastructure Improvement (RII) Track 1: Academic Research Capacity

  Water Resources in a Changing Climate – $15M
- Research Infrastructure Improvement (RII) Track 2: Cyberinfrastructure – *Western Consortium of Idaho, Nevada, and New Mexico - $2M to ID*
- Research Infrastructure Improvement (RII) C2: Intra- and Inter-campus connectivity - *$ 1.2M pending.*
- Co-funding of research and education proposals – *totaling $4.9M in FY09*

Idaho's Share of "Regular" NSF Research Funding is Increasing



NSF EPSCoR RII Academic Partners

National Science Foundation
WHERE DISCOVERIES BEGIN

BOISE STATE UNIVERSITY

Sian Mooney, Lead

Idaho State UNIVERSITY

Colden Baxter, Lead

University of Idaho

Von Walden, Science Director

Rick Allen, Lead

With support from:

- Idaho National Laboratory
- Idaho Department of Water Resources
- Idaho Department of Fish and Game
- USDA ARS Northwest Watershed Research Center
- USFS Rocky Mountain Research Station
- US Fish and Wildlife Service
- USGS

Research Infrastructure Improvement (RII)

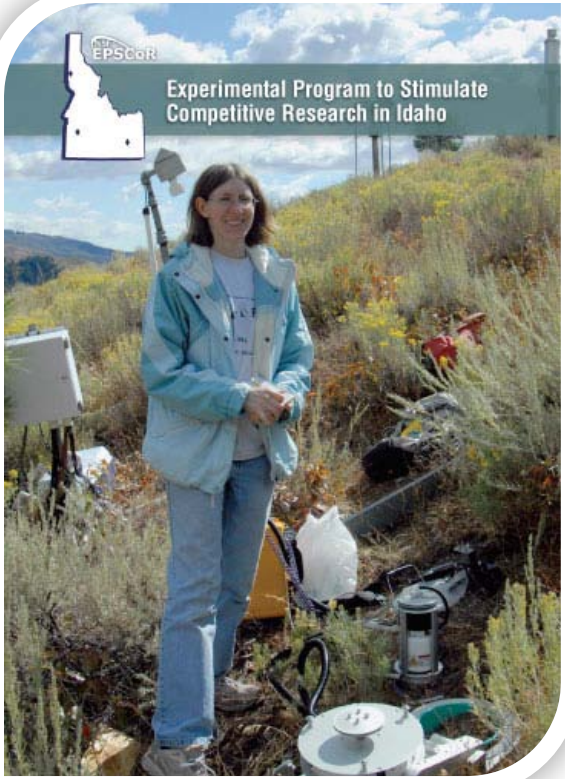
- **Personnel**
- **Research**
  - Hydroclimatology
  - Ecological Change
  - Economic and Policy
- **Cyberinfrastructure**
- **Diversity and Outreach**
- **Management/Stewardship**
- **Sustainability**

www.uidaho.edu/epscor

www.idahoclimatechange.org

Current EPSCoR RII

- Number of active faculty: 28
- Number of new hires: 5
- Number of graduate and undergraduate students supported: 62
- Number of proposals submitted: 74
- Number of Research papers: 31



Current Education, Diversity, and Outreach

- **Broad-based Initiatives for K-12 Students and Teachers**
  - Increase the participation of 7-12 grade students, K-12 teachers and RII faculty, including women and underrepresented minorities, in inquiry-based McCall Outdoor Science School (MOSS) summer science programs
- **Hispanic Enrollment in STEM (e-CAMP at BSU)**
  - Increase Hispanic undergraduate STEM enrollment by generating increased interest and mentoring for junior high and high school students and teachers
- **STEM Initiatives for Native Americans at ISU and HOIST**
  - Promote STEM education and generally improve academic performance of Native American high school and university students by creating effective education and research services
- **Engagement of Community Colleges**

Current Education, Diversity, and Outreach

- Idaho Science, Technology, Engineering, and Mathematics (STEM) Pipeline [http:/idahostem.org/]

Increase participation in STEM by Idaho children and adults by providing coordinated information and educational “pipeline” opportunities.

Sarah Penney [spenney@uidaho.edu]

Transforming Science: Expectations of the Data Policy

- Cornerstone of 'Community Science'
- NSF accelerating knowledge discovery
- RII: Cascade of data for intra- and inter- theme teams
- Demonstrate the 'EPSCoR' Advantage –rapid response, flexible, collegial researcher network
- Idaho in the Vanguard – a challenge and opportunity

Upcoming Priorities

- Data Management Plan and support Idaho cyberinfrastructure development
- NSF ‘Springboard Day’: Boise September 2, 2010
- Proposal for National EPSCoR Meeting in Coeur d’Alene, October 2011
- Anticipate and develop teams for new EPSCoR initiatives

Thank you for your attention – any questions ?

Idaho EPSCoR Office

Idaho EPSCoR: http://www.webs.uidaho.edu/epscor/

Peter Goodwin: EPSCoR/IDeA Project Director

(208) 364 6183 pgoodwin@uidaho.edu

Rick Schumaker: Project Administrator

(208) 885 5742 rschumak@uidaho.edu

Sarah Penney: Diversity, Outreach and Communication Coordinator

(208) 885 2345 sarahp@uidaho.edu

Althea Flegel: Program Coordinator

Debi Zenner: Financial Technician

THIS PAGE INTENTIONALLY LEFT BLANK

IDAHO STATE UNIVERSITY

SUBJECT

Approval to Discontinue the Electrical Technician Technical Program in the Trade and Industrial Department of the College of Technology

APPLICABLE STATUTE, RULE, OR POLICY

Idaho State Board of Education Governing Policies & Procedures, Section III.G.8.

BACKGROUND/DISCUSSION

Idaho State University proposes to discontinue the Electrical Technician Technical program due to low student demand and low program enrollment. Three years ago, only six students enrolled in the program, and there have been no student enrollments during the most recent two years.

IMPACT

There are no current resource expenditures for the Electrical Technician Technical program. Previous program funding has been reallocated to other programs within the College of Technology.

ATTACHMENTS

Attachment 1 – Notice of Intent Page 3

STAFF COMMENTS AND RECOMMENDATIONS

The Council on Academic Affairs and Programs (CAAP), the Instruction, Research and Student Affairs Committee (IRSA) and Board staff recommends approval as presented.

BOARD ACTION

A motion to approve the request by Idaho State University to discontinue the Electrical Technician Technical program.

Moved by _____ Seconded by _____ Carried Yes _____ No _____

THIS PAGE INTENTIONALLY LEFT BLANK

ATTACHMENT 1

Institution Tracking No. 2009-17

ACADEMIC AFFAIRS
NOV 1 1 2009

IDAHO STATE BOARD OF EDUCATION

COT-2009-36

ACADEMIC/PROFESSIONAL-TECHNICAL EDUCATION

NOTICE OF INTENT

To initiate a

New, Expanded, Cooperative, Discontinued, program component or Off-Campus Instructional Program or Instructional/Research Unit

Institution Submitting Proposal: Idaho State University

Name of College, School, or Division: College of Technology

Name of Department(s) or Area(s): Trade and Industrial

Indicate if this Notice of Intent (NOI) is for an Academic or Professional Technical Program
Academic _____ Professional - Technical X

This is a New, Expanded, Cooperative, Contract, or Off-Campus Instructional Program, or Administrative/Research Unit (circle one) leading to:

_____
(Degree or Certificate)

Proposed Starting Date: N/A

For New Programs:

_____
Program (i.e., degree) Title & CIP 2000

For Other Activity:

- ☐ Program Component (major/minor/option/emphasis)
- ☐ Off-Campus Activity/Resident Center
- ☐ Instructional/Research Unit
- ☐ Addition/Expansion
- ☒ ~~Discontinuance/consolidation~~ (Tech. Cert. Electrical Technician)
- ☐ Contract Program
- ☐ Other

Marilyn Davis 11/9/09			
College Dean (Institution)	Date	VP Research & Graduate Studies	Date
James A. Stobbe 3/11/10		Ann Stephens 4-14-10	
Chief Fiscal Officer (Institution)	Date	State Administrator, SDPTE	Date
Terry A. Olson			
Chief Academic Officer (Institution)	Date	Chief Academic Officer, OSBE	Date
3/12/10			
President	Date	SBOE/OSBE Approval	Date

Revised 07/06/09

Before completing this form, refer to Board Policy Section III.G., Program Approval and Discontinuance.

1. Briefly describe the nature of the request e.g., is this a new program (degree, program, or certificate) or program component (e.g., new, discontinued, modified, addition to an existing program or option).

   The purpose of this NOI is to discontinue the Electrical Technician technical certificate within the Trade and Industrial department in the College of Technology (COT).

2. Provide a statement of need for program or a program modification. Include student and state need, demand, and employment potential. **Attach a Scope and Sequence, SDPTE Form Attachment B, for professional-technical education requests**. (Use additional sheets if necessary.).

   The Electrical Technician technical certificate is being eliminated in response to low student demand and consequent low program enrollment. Although there is still state need, demand, and employment potential for journeymen electricians, training is available through the COT Workforce Training Program, which facilitates apprenticeship programs offered by the International Brotherhood of Electrical Workers and the State of Idaho Division of Building Safety.

3. Briefly describe how the institution will ensure the quality of the program (e.g., accreditation, professional societies, licensing boards, etc.). N/A

4. Identify similar programs offered within the state of Idaho or in the region by other colleges/universities. If the proposed request is similar to another program, provide a rationale for the duplication. This may not apply to PTE programs if workforce needs within the respective region have been established.

   The issue of program duplication is irrelevant to this request for the elimination of a technical certificate.

   Enrollment and Graduates (i.e., number of majors or other relevant data)
   By Institution for the Proposed Program
   Last three years beginning with the current year and the 2 previous years

   Except for ISU, no other institutions listed below have a program that offers an Electrical Technician technical certificate (CIP code 46.03).

Institution	Relevant Enrollment Data			Number of Graduates		
	Current	Previous Year	Previous Year	Current	Previous Year	Previous Year
BSU						
CSI						
CWI						
EITC						
ISU	0	0	6	0	0	5
LCSC						
NIC						

UI						

Degrees offered by school/college or program(s) within disciplinary area under review

None of the institutions listed below offer a degree for Electrical Technician (CIP code 46.03).

Institution and Degree name	Level	Specializations within the discipline (to reflect a national perspective)	Specializations offered within the degree at the institution
BSU			
CSI			
CWI			
EITC			
ISU			
LCSC			
NIC			
UI			

5. Describe how this request is consistent with the State Board of Education's policy or role and mission of the institution. (i.e., centrality).

   Eliminating the Electrical Technician technical certificate will remove a program offering that does not meet student needs as reflected by a consistent lack of enrollment, and this, in turn, will promote the goal of maximizing efficient use of education resources that is set forth in the Idaho State Board of Education Strategic Plan 2007-2010 at http://www.boardofed.idaho.gov/overview/vm.asp It is not cost effective to operate a program with little or no enrollment.

6. Is the proposed program in your institution's regional8-year plan? Indicate below.

   Yes ____ No X

   If not on your institution's regional 8-year plan, provide a justification for adding the program.N/A

7. List potential ways your institutions can collaborate with other institutions on this program to reduce cost and expand learning opportunities in Idaho. N/A

8. Resources--Faculty/Staff/Space Needs/Capital Outlay. (Use additional sheets if necessary.):

The purpose of this NOI is to discontinue the Electrical Technician technical certificate within the College of Technology Trade and Industrial Department. There are no current resource expenditures. Previous funding for this program has been reallocated to other programs within the College of Technology. No students have enrolled in the program since FY08.

Estimated Fiscal Impact	FY 08	FY 09	FY 10	Total
A. Expenditures				
1. Personnel	62,547	0	0	62,547
2. Operating	5,280	0	0	5,280
3. Capital Outlay	0	0	0	0
4. Facilities	0	0	0	0
TOTAL:	67,827	0	0	67,827
B. Source of Funds				
1. Appropriated-reallocation	67,827	0	0	67,827
2. Appropriated – New	0	0	0	0
3. Federal	0	0	0	0
4. Other:	0	0	0	0
TOTAL:	67,827	0	0	67,827
B. Nature of Funds				
1. Recurring *	0	0	0	0
2. Non-recurring **	0	0	0	0
TOTAL:	0	0	0	0

*** Recurring is defined as ongoing operating budget for the program, which will become of the base.**
**** Non-recurring is defined as one-time funding in a fiscal year and not part of the base.**

IDAHO STATE UNIVERSITY

SUBJECT

Approval of the Full Proposal for Ph.D. in Experimental Psychology

APPLICABLE STATUTE, RULE, OR POLICY

Idaho State Board of Education Governing Policies & Procedures, Section III.G

BACKGROUND/DISCUSSION

The Department of Psychology has offered, since 1968, a Masters in Experimental Psychology program. The department now has the faculty expertise and maturity to expand this on-campus program into a Doctorate of Philosophy (Ph.D.) in Experimental Psychology. This program will be administered by the Department of Psychology, which is an academic unit within the College of Arts and Sciences. The Department of Psychology also administers the Clinical Psychology Ph.D. program, which is fully accredited by the American Psychological Association. The Experimental Psychology Ph.D. degree program has been included in the Idaho State Board of Education's Eight Year Plan, with an implementation date of 2010. Additionally, Experimental Psychology is considered one of the Science, Technology, Engineering, and Mathematics (STEM) disciplines. With appropriate Board approvals and internal funding reallocation, it would be possible to start this program as early as fall semester of 2011, as initial faculty and program components are already in place within the broad discipline of Psychology.

Over the last decade, Idaho State University has increased its commitment to health-related professions, and recently, Idaho State University had increased its commitment to increasing research productivity. To this end, the University has invested in productive and highly-skilled faculty in the Department of Psychology. The quantity and quality of faculty and other resources now enables the Department of Psychology to provide the proposed Ph.D. in Psychology with modest reallocation of funding phased in over the next several years. Further, the faculty are prepared and able to offer the few additional courses necessary to offer this program to students (see External Reviewers' Report).

The advantage of this degree program is that it allows those students interested in a research-focused degree in psychology to complete their work in Idaho and receive the degree that reflects their expertise. There is high demand for doctoral degrees in psychology. Each year the Clinical Psychology Ph.D. program receives 80 to 100 applications. However, because of accreditation standards, the department can offer admissions to only 6 students a year. The Experimental Psychology Ph.D. program could offer admissions to more students; the limitations placed on clinical degrees are not applied to experimental degrees. Thus, offering a Ph.D. in Experimental Psychology at Idaho State University will provide additional educational options for students,

thereby increasing the number of graduates in the STEM disciplines and enhancing their future employment and career options (as indicate in the letter of support). In addition, it will allow faculty members to increase Idaho State University's productivity and maintain teaching standards of excellence that are already established.

IMPACT

As indicated in the Full Proposal, Idaho State University's administration will need to reallocate money internally for this program as it is phased in over several years. However, the program will attract additional graduate students, which will increase revenue to the University, and increase the number of Ph.D. graduates. The program faculty is likely to attract additional external research funding.

ATTACHMENTS

Attachment 1 – Full Proposal Page 3

STAFF COMMENTS AND RECOMMENDATIONS

Currently, there are no doctoral programs in Experimental Psychology offered in Idaho. The University of Idaho offers a Master's in Psychology program that offers specializations in areas of Human Factors Psychology and is offered in Moscow and Idaho Falls.

Idaho State University's request to create a new Ph.D. in Experimental Psychology is listed in their Eight-Year Regional Plan for Delivery of Academic programs in the Southeastern Region. The Council on Academic Affairs and Programs (CAAP) and Board staff has reviewed the proposal and recommends approval.

BOARD ACTION

A motion to approve the request by Idaho State University to implement the Ph.D. in Experimental Psychology.

Moved by _____ Seconded by _____ Carried Yes _____ No _____

Institution Tracking No. 2006-37

ATTACHMENT 1

IDAHO STATE BOARD OF EDUCATION

ACADEMIC/PROFESSIONAL-TECHNICAL EDUCATION

FULL PROPOSAL

to initiate a

NEW, EXPANDED, COOPERATIVE, DISCONTINUED, PROGRAM COMPONENT OR OFF-CAMPUS INSTRUCTIONAL PROGRAM OR ADMINISTRATIVE/RESEARCH UNIT

RECD ISU / GS

SEP 2 5 2009

Submitted by:

Idaho State University

Institution Submitting Proposal

College of Arts and Sciences

Name of College, School, or Division

Psychology

Name of Department(s) or Area(s)

A New, Expanded, Cooperative, Contract, or Off-Campus Instructional Program Leading to:

Expanded graduate program—
from M.S. to Ph.D. in Experimental Psychology
Degree/Certificate & 2000 CIP

Program Change, Off-Campus Component

Fall 2010
Proposed Starting Date

This proposal has been approved by:

IDAHO STATE UNIVERSITY
Received
OCT 0 2 2009
OFFICE OF ACADEMIC AFFAIRS

James A. Sutherland 2/3/10
Chief Fiscal Officer (Institution) Date

Gary A. Olson 1-5-2010
Chief Academic Officer (Institution) Date

Curtis Vaughan 2/10/10
President Date

D. D. Lowe 5/11/10
Chief Academic Officer (Institution) Date

SBOE/OSBE Approval Date

Before completing this form, refer to "Board Policy Section III.G. Program Approval and Discontinuance.

1. Describe the **nature of the request**. For example, is this a request for a new on-campus program? Is this request for the expansion or extension of an existing program, or a new cooperative effort with another institution or business/industry or a contracted program? costing greater than $150,000 per year? Is this program to be delivered off-campus or at a new branch campus? Attach any formal agreements established for cooperative efforts, including those with contracting party(ies). Is this request a substantive change as defined by the NWASC criteria?

   The Department of Psychology has offered, since 1968, a Masters in Experimental Psychology program. The department now has the faculty expertise and maturity to expand this on-campus program into a Doctorate of Philosophy (Ph.D.) in Experimental Psychology. (See question 5c for more detail.)

2. **Quality** – this section must clearly describe how this institution will ensure a high quality program. It is significant that the accrediting agencies and learned societies which would be concerned with the particular program herein proposed be named. Provide the basic criteria for accreditation and how your program has been developed in accordance with these criteria. Attach a copy of the current accreditation standards published by the accrediting agency.

Further, if this new program is a Doctoral, professional, or research, it must have been reviewed by an external peer-review panel (see page 7, "Guidelines for Program Review and Approval). A copy of their report/recommendations must be attached.

An external review of the Department's capacity and faculty expertise required to offer this Doctoral degree was conducted in October 2008. A copy of the external peer-review panel report is attached with this proposal.

Specialized accreditation is not available for Experimental Psychology programs. However, the rigorous core courses for our Masters students are the same as those approved by the American Psychological Association (APA) for our accredited clinical psychology Doctoral degree. Moreover, the department chair attends the Council of Graduate Departments of Psychology (COGDOP) each year to maintain knowledge and update systems for managing a high quality Psychology Department. Our current and proposed program is consistent with COGDOP recommendations.

In addition, the curriculum for the Masters program is focused on assessable goals and outcomes that we evaluate formally every two years via our outcome assessment procedures. Using completed theses, we determine whether our program goals are met. These goals include: ensuring that students can integrate knowledge and think critically, demonstrate competence in scientific methodology and analysis, participate actively in the research process, and effectively communicate in oral and written forms. We will continue this process with the Doctoral program, but expand the goals and outcomes to reflect those of the expanded curriculum. Students will graduate with the ability to integrate psychological literature, conceptualize and conduct psychological studies (including analysis and interpretation of the data), write technically, as well as present these data to the scientific community via oral, written, and visual forms.

a. Curriculum – describe the listing of new course(s), current course(s), credit hours per semester, and total credits to be included in the proposed program.

The Ph.D. program in Experimental Psychology will provide students with an education and research training in core areas of psychological science, including personality, social psychology, learning, sensation and perception, cognition, developmental psychology, and physiological psychology. Students who complete the Ph.D. program may pursue academic or non-academic careers. To prepare for their future careers, students need to (i) have a solid foundation in basic areas of psychology (breadth of knowledge) and also (ii) develop expertise in their research areas (depth of knowledge). Our program offers a wide variety of courses to help students accomplish their career goals:

Current Curriculum

Our current curriculum for the MS in Experimental Psychology is listed below:

1 . Required courses. Each student must complete these courses (12 credits total):

PSYC 627 Statistics and Research Design I (3 credits)
PSYC 632 Statistics and Research Design II (3 credits) 12
PSYC 650 Thesis (6 credits)

2. Area Requirements. Each student must complete one 3-credit course from each of the following areas of psychology:

Area A. Biological Basis of Behavior
PSYC 504 Sensation & Perception
PSYC 531 Physiological Psychology I
PSYC 532 Physiological Psychology II 12
Area B. Cognitive-Affective Bases of Behavior
PSYC 642 Cognitive Psychology
Area C. Social Bases of Behavior
PSYC 643 Advanced Social Psychology
Area D. Individual Behavior
PSYC 644 Advanced Developmental Psychology
PSYC 647 Personality and Individual Differences

3. Electives. In addition, each student must complete 12 credits of elective courses, six of which should be in a related field of study approved by the student's graduate advisor.

12

36 credits

Expansions for the Ph.D.
The M.S. program requires completion of a minimum of 36 credits (including a thesis) for graduation. For the Ph.D. program, we will expand this curriculum, such that a student will complete a minimum of 70 credits. In response to external reviewers' suggestions, we made several changes in the curriculum. These changes enable students to devote more time to develop research specialization/ expertise. Table 1 provides a summary of the proposed curriculum:

Table 1. Curriculum for the Ph.D. in Experimental Psychology.
Bolded courses represent new courses to be added to the curriculum.

Curriculum component	Number of credits
1. MS required courses and areas requirements	24 credits (described above)
2. Additional required courses (already offered) a. PSYC 637 Multivariate Statistics	3 credits
3. New area requirement— Area E. PSYC 649 Learning	**3 credits**
4. Foundation courses (already offered; select one) a. PSYC 512 Ethical & Professional Issues (2 credits) b. PSYC 623 Adv Psych Measurement (3 credits) c. PSYC 672 History and Systems (3 credits)	2-3 credits
5. Career development course a. PSYC 602 Teaching of Psychology	2 credits
6. Research training a. PSYC 583 Special Problems (Research experience) b. PSYC 641 Special Problems (Research experience)	12 credits
7. PSYC 850 Dissertation	12 credits
8. Electives/Specialization: Students complete 12 specialization credits from seminars and courses within the department and courses outside the department. The combination of courses may be unique to each student and is based upon the recommendation of his/her graduate advisor. Students should not take more than 6 credits outside of the department. a. **Experimental Seminars** (1-2 offered per semester) AND/OR b. Specialization courses outside of department (e.g., Biology Department, College of Pharmacy)	12 credits
Total	70 credits*

Note: The total number of credits will be 71 if students take a 3-credit Foundation course.

For an Experimental Ph.D., we will expand our existing course requirements for the Masters:

1. We will add four already-existing graduate courses to the curriculum. These are PSYC 637 Multivariate Statistics, PSYC 512 Ethical & Professional Issues, PSYC 623 Advanced Psych Measurement, and PSYC 672 History and Systems.
2. We will add a new area requirement, PSYC 649 Learning.
3. For research training, we will add courses such as PSYC 583 Special Problems (Research Experience) and PSYC 641 Special Problems (Research Experience). These courses are designed to develop students' research expertise.
4. For electives, we will create *specialization courses* by offering one to two Experimental Seminars per semester. The topic of the seminar would change from semester to semester, depending on the specialty area of the faculty member who teaches it. Because the Experimental Seminars rotate among our six Experimental faculty members, each faculty member need only teach the new seminar class once every 2-3 years. These seminars will complement and expand the core areas of the Experimental Psychology program. Students must also take PSYC 602 Teaching of Psychology to prepare them for academic and other professional careers in Experimental Psychology. Finally, students also may add courses of specialization by taking other courses offered in the department, as well as outside the department. Table 2 gives some examples of courses students could take from other departments that would complement specializations offered in psychology:

Table 2. Examples of courses from other programs that may be used as specialization courses for the Experimental Psychology Ph.D.

Possible area of specialization	Department	Courses
Behavioral Pharmacology	Pharmacy	PSCI 602 Research Design and Analysis For Pharmaceutical Sciences PSCI 603 Scientific Writing
Neurobiology	Biology	BIOL 515 Human Neurobiology BIOL 560 Neuroscience
Animal Behavior	Biology	BIOL 662 Advanced Developmental Biology BIOL 601 Animal Behavior
Psychopharmacology	Pharmacy	BIOL 132 Biochemistry PHAR 961 Pharmacotherapy PHAR 944 Social and Behavioral Medicine

5. We will also require a comprehensive exam and dissertation, which is already in place for the clinical program.

As can be seen, the departmental accommodations to set this plan in motion are minimal.

b. Faculty – include the names of full-time faculty as well as adjunct/affiliate faculty involved in the program. Also, give the names, highest degree, rank and specialty. In addition, indicate what percent of an FTE position each faculty will be assigned to the program. Are new faculty required? If so, explain the rationale including qualifications.

Name	Rank	Percent of FTE position	Other responsibilities
Core Program Faculty:			
Kandi Turley-Ames, Ph.D.	Professor	90%	Department Chair
Erin Raumussen, Ph.D.	Associate Professor	90%	
Maria Wong, Ph.D.	Associate Professor	90%	
Michele Brumley, Ph.D.	Assistant Professor	90%	
Tera Letzring, Ph.D.	Assistant Professor	90%	
Kathleen McCulloch, Ph.D.	Assistant Professor	90%	
Other Program Faculty:			
Anthony Cellucci, Ph.D.	Professor	25%	Clinic Director
Mark Roberts, Ph.D.	Professor	25%	Director of Clinical Training
Peter Vik, Ph.D.	Professor	25%	
Shannon Lynch, Ph.D.	Associate Professor	25%	
Steven Lawyer, Ph.D.	Assistant Professor	25%	
Nicole Prause, Ph.D.	Assistant Professor	25%	
Other Contributors:			
Linda Hatzenbeuhler,Ph.D.	Professor	10%	Vice President for Health Education
Tom Jackson, Ph.D.	Professor	5%	Dean of Graduate Studies
Victor Joe, Ph.D.	Professor Emeritus	5%	
Linda Enloe, Ph.D.	Associate Professor Emeritus	5%	
Nicholas Heyneman, Ph.D.	Adjunct Faculty	5%	
Steve Stephens, Ph.D.	Adjunct Faculty	5%	Deputy Director, Institute of Rural Health
Beth Stamm, Ph.D.	Research Professor	5%	
Deb Larsen, Ph.D.	Adjunct Faculty	5%	
Cheri Atkins, Ph.D.	Adjunct Faculty	5%	
John Landers, Ph.D	Adjunct Faculty	5%	
Heath Sommer, Ph.D.	Adjunct Faculty	5%	
Daniel Traughber, Ph.D.	Adjunct Faculty	5%	
Rick Pongratz, Ph.D.	Adjunct Faculty	5%	

The Department of Psychology has 12 full-time faculty members, 6 of whom have expertise in Experimental Psychology. ISU's Department of Psychology is unique in that our faculty is collaborative, and we encourage cross-program research and mentoring across the Experimental Psychology and Clinical Psychology graduate programs. Our faculty has very diverse research and teaching interests, which is ideal for an Experimental Psychology program. Our research interests include physiological and comparative psychology, behavioral pharmacology, animal learning, neuroscience, developmental psychology, substance abuse, depression, resilience, working memory, cognition, social psychology, mood, person perception, and longitudinal methodology and analysis. As the Masters program stands currently, we have adequate teaching and mentoring resources. If the Psychology Department accepted 5-6 students into the proposed Doctoral program in 2010, we would only require funds to cover two course releases for that year (for the Director of Experimental Training; DET) and pay for irregular help (e.g., adjunct) such that the graduate learning course could be offered (see Appendix A on page 17 for 3-year plan).

As of now (2008-9), the number of faculty satisfies the needs of starting the proposed Doctoral program. The Experimental Psychology faculty not only teach the majority of courses offered in the graduate core (including those for the clinical psychology program), but also teach a large portion of the undergraduate curriculum. Consistent with the recommendations of external reviewers, as we phase in components of a Doctoral program, we would need two additional faculty lines to assist in teaching core and specialty areas of the undergraduate and graduate programs, and mentoring graduate student research. The specialty areas we would hire for would be based on needs at the time of hire. For example, to enhance and promote collaborations between the Experimental Psychology program and the Idaho National Laboratory (INL; which has agreed to support paid part-time research positions for our program — see Appendix), one faculty line might be in the area of decision making. As another example, to take advantage of the ongoing relationship between the Experimental Psychology program and the Clinical Psychology program, the second faculty line might be in the area of health psychology or behavioral medicine. Incidentally, the emphasis on health psychology or behavioral medicine is consistent with the health mission of the university. While these lines are not required immediately, we would phase in one in 2011 and the second in 2012. By 2013, the proposed Doctoral program should be nearing maximal output in terms of admitting students, offering courses, and generating research. This goal is consistent with what is written in the 8-year Plan for the ISU Department of Psychology.

c. Student – briefly describe the students who would be matriculating into this program.

In the beginning years of the program, the students would likely be undergraduate psychology majors from ISU, Boise State University, and Brigham Young University-Idaho (see needs assessment under 5b). We make annual recruitment trips to various universities in the region (e.g., Utah State University, Albertsons College, Weber State University, etc.) to enable students to familiarize themselves with our graduate programs. We assume as word spreads, more students from these areas in the region would apply. Also, as our research programs expand with a Doctoral program in place, we expect our research to gain greater national attention. As such, more students from around the country are likely to apply. In our clinical program, for example, the vast majority of students who apply are from outside the region.

d. Infrastructure support – clearly document the staff support, teaching assistance, graduate students, library, equipment and instruments employed to ensure program success.

Administrative support: We believe that it is crucial that the Doctoral program have a Director of Experimental Training (DET) at the inception of the proposed program. The DET would function in an analogous manner to the Director of Clinical Training for the clinical Doctoral program, in terms of being in charge of the logistical aspects of running a Doctoral program. The workload for this kind of job is substantial and is typically equal to the time placed in the operations of a course. Hence, we propose a one-course reduction per semester to the person appointed as DET by the chair, and administrative pay for 10 months that is similar to what the Director of Clinical Training is currently paid. As per the recommendation of the external review team, we have developed a job description for the DET.

Staff support: Lisa Coleman, a full time administrative assistant, is responsible for administrative support to both graduate programs in psychology, as well as the undergraduate program. We also currently have two part-time work study office assistants. Our current administrative staff is working at their maximum capacity. As such, we included in our proposed budget a half-time office specialist to assist the faculty and manage the increase in workload that would come from the Experimental Ph.D. program.

Teaching assistance: Adjunct faculty member(s) are needed to teach one to two undergraduate courses in 2010-2012. This will allow current Experimental faculty to teach graduate courses. The

cost for additional adjunct faculty is potentially non-recurring. By 2012, when the two permanent faculty lines are filled, there will be little need for adjunct faculty members to support this program.

Graduate Teaching Assistants: Because of the additional elective seminars that are needed to complement the core curriculum of the proposed program, it is necessary to free up the Experimental faculty to teach more graduate courses by offering lower level courses (e.g., PSYC 101 Introductory to General Psychology) to be taught by seasoned graduate students, particularly those with academic interests. This would also allow those students to obtain mentored training in teaching. Hence, our proposed budget includes two GTAs to be filled by students admitted to the Experimental program, one by 2012 and the second by 2013. We also request funds for one of our current Masters-level GTAs to be upgraded to a Doctoral-level GTA; the money for this upgrade is included in the budget for GTAs.

Graduate Research Assistant: One graduate research assistant will be needed to assist the faculty in grant writing. S/he will help to prepare literature reviews, collect preliminary data, and gather all the necessary information related to federal government and private foundation funding proposals. We expect that within a few years, faculty members will be able to support this position by external research grants.

As the Experimental Ph.D. program develops, we expect to increase the number of graduate students enrolled in the program. In order to increase the support for GRAs and GTAs, we will gradually acquire more funding opportunities. We expect that INL, at a minimum, will fund one to two externships each year (see Appendices). Some members of the experimental faculty are writing federal grant proposals, which include funding for GRAs. Several proposals have been submitted recently, and others will follow. While the funding for these proposals is tentative, we feel that the submission of them is a logical first step in our goal to fund our students with GRAs and see this as a strong possibility as our peer institutions are able to fund a substantial number of students in this manner (Table 3).

Space: Currently, each faculty member has his/her own office and laboratory, so space needs for the present are adequate. As the reviewers pointed out, we will need additional research and office space for new hires in the near future. Psychology occupies the 4th and 5th floors of Garrison Hall. Currently, some faculty members from Biology are housed on the 6th floor. We are aware that a new biological sciences building will be built in the future, so that all Biology faculty and their labs will be centralized. Additionally, the Idaho State University Biomedical Research Institute (IBRI) will build a new animal facility in the future, which will house all animal labs. We propose that part of the 6th floor and the basement, currently occupied by Biology, be given to psychology for additional laboratories and offices.

Library holdings: Currently, the library holdings meet the needs of faculty in Experimental Psychology. We have access to all of the journals published by the American Psychological Association, as well as various top Experimental Psychology periodicals put out by various publishers. However, additional books, journals, and electronic periodicals ($9,000) will be necessary to meet the needs of the two future faculty lines and a greater influx of students. (See Appendices—correspondence from Les Wilson and Kay Flowers.)

Equipment: All faculty members have adequate office and lab computers. We also have a student computer lab that houses six computers (includes Microsoft Office and other statistical software programs) and two printers. The lab seems to meet the needs of the graduate students, but upgrades, including the purchase of licenses for statistical software packages will be required for the future.

e. Future plans – discuss future plans for the expansion or off-campus delivery of the proposed program.

Because we require that our students in the Doctoral program be enrolled full time, there is no plan for off-campus delivery of the program. However, depending on demand from BYU-Idaho (see letter of support from BYU-I in the Appendices), we may be able to deliver some courses through Idaho Falls.

3. **Duplication** – if this program is unique to the state system of higher education, a statement to that fact is needed. However, if the program is a duplication of an existing program in the system, documentation supporting the initiation of such a program must be clearly stated along with evidence of the reason(s) for the necessary duplication..

Describe the extent to which similar programs are offered in Idaho, the Pacific Northwest and states bordering Idaho. How similar or dissimilar are these programs to the program herein proposed?

There are no Doctoral programs in Experimental Psychology in the state of Idaho. Currently, there is a Master's in Human Factors program at the University of Idaho (U of I), which is a specific branch of Psychology that involves how humans interact with technology. The curriculum proposed for a Doctoral program in Experimental Psychology overlaps minimally with the U of I's curriculum. For example, of their seven core courses, six of them are technology and design-related courses; our core contains no courses in these areas. Two of their seven core courses are research-related; to date, all of our core courses are research related. U of I's program does not require a course in statistics; our current program requires two, and our proposed program will require three. A thesis for U of I's Human Factors program is optional; ours is required. U of I tends to place their students in industry and private settings; our placement will be much broader. These indicators suggest that the focus of U of I's program is very different from the focus of our proposed program. We wish to be direct in supporting U of I's efforts in maintaining their program in human factors. We visualize our Doctoral program as a more general one with the opportunity to specialize in specific focus areas in Experimental Psychology. We anticipate the program to draw in a broader cross-section of students and will fully utilize the talents of our diverse faculty.

Immediately outside of Idaho there are two universities with Doctoral programs in Experimental Psychology: University of Wyoming (U of W), which is an eight-hour drive from Pocatello, and University of Montana (U of M), which is a six-hour drive. However, each institution has specialty tracks. U of W, for example, has developmental and social psychology tracks. Our program would be fundamentally different because the opportunity for specialization would be much broader. As things stand currently, it would be impossible, for example, for a student to receive post-graduate training in cognitive psychology, learning, behavioral pharmacology, neuroscience, or personality without going outside of the region. Our program would make it possible to receive these types of focused mentoring in specialty areas.

4. **Centrality** – documentation ensuring that program is consistent with the Board's policy on role and mission is required. In addition, describe how the proposed program relates to the Board's current Statewide Plan for Higher Education as well as the institution's long-range plan.

There are two manners in which our proposed Doctoral program supports the SBOE's and ISU's mission for ISU. First, the Department of Psychology has a broad health emphasis. Traditionally, psychology is viewed as central to mental health, and indeed our department's teaching and research endeavors support that. However, we also offer courses in biological and physical sciences (e.g., two courses in physiological psychology, sensation and perception, behavioral medicine, psychopharmacology), and courses that prepare the student for conducting research in physical and mental health. Moreover, Experimental faculty members have research interests in the areas of health, including developmental and behavioral neuroscience, teratology, motor function, substance abuse, depression, resilience, and obesity. Other areas that are relevant to decision-making and attitude formation (e.g., person perception, attention, executive function, working memory, cognitive strategies, mood, multiculturalism, and diversity) contribute to the

health mission by examining the conditions under which human cognitive and behavioral strategies lead to poor mental and physical health outcomes. Last but not least, faculty members also investigate strategies that *positively* impact mental or physical health.

The second manner in which our proposed program supports the mission of the SBOE's policy is through offering a degree that is general enough to be useful to a broad range of students' interests and utilizes the range of expertise and specialization that faculty members possess. Our proposed core will offer students the fundamental skills and knowledge that are necessary for independently conducting research. From there, the student can specialize in a variety of research areas by working with his/her advisor to create an individually tailored specialization area. The student and his/her advisor will assemble a list of 12 elective credit hours from courses that are offered within the Psychology Department or within other departments. Table 2 gives examples of several areas of specialization in which students could sample from a list of relevant courses offered from other departments. For example, an individual who wishes to specialize in neuroscience may want to take 3 selected courses from the Department of Psychology (9 credits), in addition to one relevant elective courses offered in the Department of Biology (3 credits). As another example, a student who wants to specialize in Psychopharmacology may want to take one or two elective courses offered in the Department of Biology and College of Pharmacy. Encouraging cross-department ties will likely offer the students unique perspectives, increase cross-department interactions and collaborations, and will also be a cost-efficient approach in offering students a wealth of courses using few resources. Moreover, it supports the interdisciplinary mission of the university. It is important to note that other academic units in ISU support the formation of an Experimental Psychology Ph.D. program. For instance, the Informatics Research Institute strongly supports the establishment of the Ph.D. program. Faculty members at the Institute believe that such a program will foster cognitive decision-making research and grant-writing collaborations (see Appendices for a letter of support from Corey Schou, Ph.D.).

5. **Demand** – address student, regional and statewide needs.

   a. Summarize the needs assessment that was conducted to justify the proposal. The needs assessment should address the following: statement of the problem/concern; the assessment team/the assessment plan (goals, strategies, timelines); planning data collection; implementing date collection; dissemination of assessment results; program design and on-going assessment. (See the Board's policy on outcome assessment.)

   Our needs assessment was completed by the Experimental faculty and comprised two parts. For the first part, we were interested in how a Doctoral program in Experimental psychology would be structured. We were also interested in determining how far our current resources deviated from departments with well-established Experimental psychology Doctoral programs, in an effort to determine if expanding our program was feasible. We were also interested in examining the kinds of revenue a Doctoral program could generate. To accomplish this, we surveyed five Experimental psychology programs, all of which have co-existing clinical Doctoral programs. Table 3 shows the results of the first part of our needs assessment.

Table 3. Information from comparable institutions with Experimental Ph.D. program

	Washington State	Auburn	U of Montana	U. Wyoming	University of Nevada-Reno
External grant funding per fiscal year (excluding indirect costs)	$170,800	$750,000	$100,000	$640,000	5 grants
# of Experimental faculty in program (and department)	18 (31)	9 (18)	10 (25)	9 (13)	5
# or % GRAs funded from grants	20	10	10-20%	44%	5-6
% of students funded thru GTAs, GRAs, and service providers	100%	100%	100% full or partial support	100%	100%
Mean # of students applied and admitted in last 3 years	20 applied; 6 admitted	13 applied; 5 admitted	18 applied; 3 admitted	0-5 admitted	15 applied; 5 admitted
% of faculty retained in last 10 years	69%	50%	50%	56%	No information
Teaching workload	2:2	2:2, 2:3 every other year	2:2, 1:2 for new faculty	2:2	2:2
Entry level salary for assistant professor	$47,000-49,000	$55,000-58,000	$43,000-45,000	$52,000-57,000	$54,000

It became clear to us that our current resources are on the cusp of the lower range of the surveyed Doctoral programs. If we are able to gain two faculty lines and additional GTAs, we could cover the additional courses we would need for the program. Moreover, with our current workload policy approved by the College of Arts and Sciences, we would be able to manage a teaching load that would permit us to write more grants for external funding. Currently, we are able to support most of our graduate students with teaching assistantships and research assistantships. Additional GTAs will allow us to support more students who have been admitted to the proposed Doctoral program. Finally, we will be in a stronger position to secure research funding (including funding for GRAs) with federal money, as other peer institutions have done, which will bring revenue to the university and to the department. There are currently two GRAs supported by faculty research grants.

The second part of our needs assessment was conducted to determine how many students would be interested in applying to, and enrolling in, an Experimental Psychology Doctoral program at ISU. The chairs of Psychology departments at other universities in Idaho were contacted by email and asked to inform their undergraduate psychology majors and Masters degree students about an on-line survey that would assess the need for an Experimental Psychology Doctoral program in Idaho. A total of 448 students from Idaho State University, Boise State University, University of Idaho, and Brigham Young University-Idaho responded. Of these students, 148 reported considering attending graduate school in Experimental Psychology. Of these 148 students, 113 were extremely likely or somewhat likely to apply to an Experimental Psychology Ph.D. program at ISU, and 110 were extremely likely or somewhat likely to attend the program if accepted. Availability of funding, quality of the faculty, and geographic location are important factors affecting students' decision about which school to attend. More than half of these students thought they would likely be employed in Idaho after completing an Experimental Psychology Ph.D. program. Table 4 shows complete results from the second part of the needs assessment survey.

Table 4a. Student needs assessment data – Part I

what about Labor projections for need? Are letters of support sufficient?

N=428 (426 Psychology majors; 399 intended to go to graduate school)	
<u>School currently attending</u>	
Boise State University	171
BYU-Idaho	167
ISU	108
U of Idaho	1
<u>Academic standing</u>	
Master	9
Senior	149
Junior	144
Sophomore/Freshmen	145
<u>Type(s) of Graduate programs being considered</u>	
Experimental Psychology	148 (37.1%)
Clinical Psychology	221 (55.4%)
Field other than Psychology	104 (26.1%)
Undecided	130 (32.6%)

Table 4b. Student needs assessment data – Part II

N=148 (all were considering an Experimental Psychology Ph.D. program)

Probability of applying to Experimental Psychology Ph.D. program at ISU if one were available

Extremely likely	58 (39.2%)
Somewhat likely	55 (37.2%)
Not sure	22 (14.9%)
Somewhat unlikely	8 (5.4%)
Extremely unlikely	5 (3.4%)

If accepted into an Experimental Psychology Ph.D. program at ISU and a similar program in another university, likelihood of attending ISU

Extremely likely	69 (46.6%)
Somewhat likely	41 (27.7%)
Not sure	20 (13.5%)
Somewhat unlikely	13 (8.8%)
Extremely unlikely	5 (3.4%)

Rank order of importance of factors in final decision of where to earn a Ph.D. in Experimental Psychology

	Ranking						
	1	**2**	**3**	**4**	**5**	**6**	**7**
Availability of student funding	60	24	29	10	9	7	6
Quality of the faculty	48	36	31	18	6	5	1
Geographic location	46	24	15	9	15	26	11
Research interests of faculty	25	23	18	33	27	12	7
Potential for conducting research	25	19	23	32	23	14	9
Potential for teaching experience	9	18	15	13	40	31	18
Size of community	7	9	10	8	17	24	70

Where students would most like to be employed after completing a Ph.D. program in Experimental Psychology

In the state of Idaho	82 (55.4 %)
In a Northwestern state other than Idaho	31 (20.9%)
In the Midwest	13 (8.8%)
Another region of the country	19 (12.8%)

b. Students – explain the most likely source of students who will be expected to enroll (full-time, part-time, outreach, etc.). Document student demand by providing information you have about student interest in the proposed program from inside and outside the institution.

As can be seen from Table 4, undergraduate psychology majors from Boise State, BYU-I, and ISU would likely apply to the program. Many have an interest in pursuing graduate study in Experimental Psychology (see letters in Appendices). After our program becomes established and gains more national attention, we would expect students from other areas of the country to apply. Our clinical Doctoral program, for example, is mostly comprised of students from outside of Idaho—about 1/6 are Idaho residents.

The students in the MS program are enrolled full-time, and we would expect that trend to continue with the Doctoral program. We would like to have 6 students enter the program every year, which is what we accept in our clinical Doctoral program.

Differentiate between the projected enrollment of new students and those expected to shift from other program(s) within the institution.

We do not expect other programs' enrollments to be affected by the expansion of our program. We project that providing this program will simply increase the number of students in Idaho that will attend graduate school in psychology.

c. Expansion or extension – if the program is an expansion or extension of an existing program, describe the nature of that expansion or extension. If the program is to be delivered off-campus, summarize the rationale and needs assessment.

As stated earlier in this document, the Doctoral program will incorporate the core curriculum of the existing Masters program and will be expanded in four ways that will require a student to obtain a minimum of 70 credits and fulfill the Doctoral degree requirements for Idaho State University. The four manners in which we wish to expand on the current curriculum are: One, we will add five already-existing graduate courses to the curriculum. Two, we will add new area requirement, PSYC 649 Learning. Three, for research training, we will add courses such as PSYC 583 Special Problems and PSYC 641 Special Problems (Research Experience). Four, for electives, we will create *specialization courses* by offering one to two Experimental Seminars per semester. Fifth, we will also require a comprehensive exam and dissertation. The departmental accommodations to set this plan in motion are minimal.

6. **Resources** – fiscal impact and budget

On this form, indicate the planned FTE enrollment, estimated expenditures, and projected revenues for the first three fiscal years (FY) of the program. Include both the reallocation of existing resources and anticipated or requested new resources. Second and third year estimates should be in constant dollars. Amounts should reflect explanations of subsequent pages. If the program is a contract related, explain the fiscal sources and the year-to-year commitment from the contracting agency(ies) or party(ies).

I. PLANNED STUDENT ENROLLMENT

The projections are based on information attached in the Appendices; it is assumed each student will generate 10 credits minimum. For these same numbers with weighted credits, see information in the Appendices.

	FY 2011		FY 2012		FY 2013	
	FTE	Headcount	FTE	Headcount	FTE	Headcount
A. New enrollments	60	6	150	15	210	21
B. Shifting enrollments* *these represent students from our MS program that will enroll in our Ph.D. program	30	3				

II. ADDITIONAL EXPENDITURES

Notes: 1 FTE=3 courses

In one academic year, 6 courses (2 FTEs) are assumed for one full-time faculty member.

	FY 2011		FY 2012		FY 2013	
	FTE	Cost	FTE	Cost	FTE	Cost
A. Personnel Costs						
1. Faculty	0	$0	1	$55,000	2	$113,300
2. Administrators (DET administrative costs)	0.20	$10,000	0.20	$10,300	0.20	$10,609
3. Adjunct faculty (2 courses per year in years 1 and 2)	0.45	$7,210	0.45	$7,426	0	$0
4. Graduate/instructional Assistant (3) ***	1	$3,260	2	$16,007	3	$29,515
5. Research personnel (1)	1	$12,649	1	$13,028	1	$13,419
6. Support personnel	1	$14,438	1	$14,871	1	$15,317
7. Fringe benefits*		$13,314		$33,766		$55,434
(*includes 23% fringe and health insurance for faculty; fringe, tuition, and insurance for GTAs and GRA)						
8. Other:						
Total FTE Personnel And Costs;	3.65	$60,871	5.65	$150,398	7.20	$237,594

*** One MS GTA Upgrade in FY2011 plus a second GTA in FY2012 plus a third GTA in FY2013

	FY 2011	FY 2012	FY 2013
B. Operating expenditures			
1. Travel	$0	$1,500	$3,090
2. Professional services	$0	$0	$0
3. Other services	$0	$0	$0
4. Communications	$0	$535	$835
5. Utilities	$0	$0	$0
6. Materials & supplies	$500	$500	$500
7. Rentals	$0	$0	$0
8. Repairs & maintenance	$0	$0	$0
9. Materials & goods for manufacture & resale	$0	$0	$0
10. Miscellaneous	$0	$0	$0
Total Operating Expenditures:	$500	$2,535	$4,425

	FY 2011	FY 2012	FY 2013
C. Capital Outlay			
1. Library resources	$9,000	$6,000	$6,000
2. Equipment	$6,500	$6,500	$6,500
Total Capital Outlay:	$15,500	$12,500	$12,500
D. Physical facilities Construction or major Renovation	$0	$0	$0
E. Indirect costs (overhead)	$0	$0	$0
GRAND TOTAL EXPENDITURES:	$76,871	$165,433	$254,519

III. REVENUES

	FY 2011	FY 2012	FY 2013
A. Source of funds			
1. Appropriated funds -- Reallocation – MCO	$81,727	$174,960	$267,245
2. Appropriated funds -- New – MCO	$0	$0	$0
3. Federal funds	***	***	***
4. Other grants: External grants, private foundations	***	***	***
5. Fees	$0	$0	$0
6. Other:	$0	$0	$0
GRAND TOTAL REVENUES:	$81,727	$174,960	$267,245

	FY 2011	FY 2012	FY 2013
B. Nature of Funds			
1. Recurring* NOTE: In year 3 of the program, the adjuncts will no longer be a recurring cost.	$81,727	$174,960	$267,245
2. Non-recurring**	$0	$0	$0
GRAND TOTAL REVENUES:	$81,727****	$174,960****	$267,245****

*** **We currently have one federal grant (Wong's NIH grant: $249,652) and one Foundation grant (Prause: $98,500).**

**** **Indirect costs generated from external funding will help to offset some of the program costs. Based on our needs assessment, we anticipate generating $50,000 in external funds in year 1, $150,000 in year 2, and $200,000 in year 3 to offset these numbers. We are currently exceeding these expectations. Please see Appendices for these figures.**

* Recurring is defined as ongoing operating budget for the program which will become part of the base.

** Non-recurring is defined as one-time funding in a fiscal year and not part of the base.

a. **Additional** Faculty and Staff Expenditures

Project for the first three years of the program, the credit hours to be generated by each additional faculty member (full-time and part-time), additional graduate assistants, and other instructional personnel. Also indicate salaries. After total student credit hours, convert to an FTE student basis. Please provide totals for each of the three years presented. Salaries and FTE students should reflect amounts shown on budget schedule.

Year 1--2011

Name	Rank	Annual Salary Rate	Projected Student Credit Hrs	FTE Students
Adjunct#1: To teach one course per year	(See list from question 4B.)	$3,605	450 credit hours	150 students
Adjunct#2: To teach one course per year	(See list from question 4B.)	$3,605	450 credit hours	150 students
Totals		**$7,210**		**300 FTE students**

Year 2--2012

Name	Rank	Annual Salary Rate	Projected Student Credit Hrs	FTE Students
New Line #1: To teach one undergraduate and 2 graduate courses (n=16) two semesters a year	Assistant	$55,000	Undergraduate: 900 credit hours Graduate: 192 credit hours	Undergraduate: 300 students Graduate: 64 students
Adjunct#1: To teach one courses per year	(See list from question 4B.)	$3,713	450 credit hours	150 students
Adjunct#2: To teach one courses per year	(See list from question 4B.)	$3,713	450 credit hours	150 students
Graduate Teaching Assistant #1: To each 2 courses/year	MS	$12,875	900 credit hours	300 students
Totals		**$75,301**		**600 FTE students**

Year 3-- 2013

Name	Rank	Annual Salary Rate	Projected Student Credit Hrs	FTE Students
New Line #1: To teach one undergraduate and 2 graduate courses (n=16) two semesters a year	Assistant	$56,650	Undergraduate: 900 credit hours Graduate: 192 credit hours	Undergraduate: 300 students Graduate: 64 students
New Line #2: To teach one undergraduate and 2 graduate courses (n=16) two semesters a year	Assistant	$56,650	Undergraduate: 900 credit hours Graduate: 192 credit hours	Undergraduate: 300 students Graduate: 64 students
Graduate Teaching Assistant #1: To each 2 courses/year	MS	$13,261	900 credit hours	300 students
Graduate Teaching Assistant #2: To teach 2 courses/year	MS	$13,261	900 credit hours	300 students

Totals **$139,822** **1328 FTE students**

Project the need and cost for support personnel and any other personnel expenditures for the first three years of the program.

As stated earlier in the document, we currently have one full-time administrative assistant who is responsible for administrative support to both graduate programs in psychology, as well as the undergraduate program. We also currently have two part-time work study office assistants. Our current administrative staff is working at their maximum capacity. As such, we included in our proposed budget a half-time office specialist to assist the faculty and manage the increase in workload that would come from the Experimental Ph.D. program at a recurring cost of $20,766 per year (fringe included).

b. Administrative Expenditures

Describe the proposed administrative structure necessary to ensure program success and the cost of that support. Include a statement concerning the involvement of other departments, colleges, or other institutions and the estimated cost of their involvement in the proposed program

The Doctoral program will require a Director of Experimental Training (DET) at the inception of the proposed program. As stated elsewhere in this document, the DET would function in an analogous manner to the Department of Psychology's Director of Clinical Training for the clinical Doctoral program, in terms of being in charge of the logistical aspects of running a Doctoral program. The workload for this kind of job is substantial and is typically equal to the time placed in the operations of a course. Hence, we propose a one-course reduction per semester to the person appointed as DET by the chair, and administrative pay for 10 months that is similar to what the Director of Clinical Training is currently paid ($10,000/year).

Name, Position, Rank	Annual Salary	FTE Assignment	Program Salary Dollars	Percent of Salary Dollars to the Program
To be named	$10,000	100%	$12,300 (with fringe)	Year 1= 20% Year 2= 9% Year 3= 6%

c. Operating Expenditures (travel, professional services, etc.) Briefly explain the need and cost for operating expenditures.

With the addition of two new faculty lines, travel monies for these new faculty members will be necessary for them to remain current in their discipline, interact with leaders in their fields, develop relationships that will ultimately yield external funding, and promote their professional development. On average the cost of attending a national conference in psychology is approximately $1,500. Additionally, we anticipate expenses related to telecommunications (e.g., setting new phone lines and monthly phone charges), stationary, printing etc. We estimate the costs for communications to be approximately $535 in FY 2012 (one phone line) and $835 in FY 2013 (two phone lines), and the costs for materials and supplies to be approximately $500 per year.

d. Capital Outlay

(1) Library resources

(a) Evaluate library resources, including personnel and space. Are they adequate for the operation of the present program? If not, explain the action necessary to ensure program success.

As explained earlier in this document, the library holdings currently meet the needs of faculty in Experimental Psychology. We have access to all of the journals published by the American Psychological Association, as well as various top Experimental Psychology periodicals put out by various publishers. However, additional books, journals, and electronic periodicals ($9,000) will be necessary to meet the needs of the two future faculty lines and a greater influx of students. (See Appendices—correspondence from Les Wilson and Kay Flowers.)

(b) Indicate the costs for the proposed program including personnel, space, equipment, monographs, journals, and materials required for the program.

Personnel: see above

Space: As stated earlier in the document, each faculty member currently has his/her own office and laboratory, so space needs for the present are adequate. In the future, we will need additional research and office space for new hires. Our external reviewers acknowledged this need for additional space. Psychology occupies the 4th and 5th floors of Garrison Hall. Currently, some faculty members from Biology are housed on the 6th floor. We are aware that a new biological sciences building will be built in the future, so that all Biology faculty and their labs will be centralized. Additionally, in the near future, IBRI will build a new animal facility, which will house all animal labs. We propose that part of the 6th floor and the basement of Garrison, currently occupied by Biology, be given to psychology for additional laboratories and graduate student offices when needed.

Equipment: As stated earlier in the document, all faculty members possess adequate office and lab computers. We also have a student computer lab that houses six computers and two printers. The lab seems to meet the needs of the graduate students, but upgrades, including the purchase of several licenses of statistical software programs will be required for the future. See equipment costs below.

Monographs, journals, and materials: See library holdings.

(c) For off-campus programs, clearly indicate how the library resources are to be provided.

Not applicable.

(2) Equipment/Instruments

Describe he need for any laboratory instruments, computer(s), or other equipment. List equipment, which is presently available and any equipment (and cost) which must be obtained to support the proposed program.

As stated earlier in the document, all faculty members have adequate office and lab computers. We also have a student computer lab that houses six computers and two printers. The lab seems to meet the needs of the graduate students, but upgrades, including the purchase of several licenses of statistical software programs will be required. Equipment cost ($6500 per year) will cover expenses related purchase of computers for new faculty members, statistical software licenses for students, and equipment maintenance.

e. Revenue Sources

(1) If funding is to come from the reallocation of existing state appropriated funds, please indicate the sources of the reallocation. What impact will the reallocation of funds in support of the program have on other programs?

The Provost has responsibility to reallocate funds based upon assessment and program review. Continuous program review identifies where investment of resources should be reallocated.

(2) If an above Maintenance of Current Operations (MCO) appropriation is required to fund the program, indicate when the institution plans to include the program in the legislative budget request.

Not applicable.

(3) Describe the federal grant, other grant(s), special fee arrangements, or contract(s) to fund the program. What does the institution propose to do with the program upon termination of those funds?

In the past, Idaho National Laboratory (INL) has funded one to two research externships a year. It is likely that INL will continue to do so (see Appendices). Some members of the Experimental faculty have received funding or are writing federal grant proposals, which include funding for GRAs. While the funding for these proposals is tentative, we feel that the submission of them is a logical first step in our goal to fund our students with GRAs and see this as a strong possibility as our peer institutions are able to fund a substantial number of students in this manner (see Table 3).

Appendix A. Summary of Needs Across First Three Years of Program Expansion

	2011	2012	2013	Total Needs
Faculty		One line	One line	2 lines
GTAs		One GTA	One GTA	2 GTAs to cover 4 courses/year (2 Adjuncts to cover 4 courses/year)
Courses	Learning; Rotating seminars (2/year)	Learning; Rotating seminars (2/year)	Learning; Rotating seminars (2/year)	
Staff	Director of Experimental Training (DET) Part time-- office GRA	DET Part time-office GRA	DET Part-time office GRA	1 DET 1 Office staff 1 GRA
Space		Part of 6th floor & basement of Garrison Hall		Part of 6th floor & basement of Garrison Hall

EXTERNAL REVIEW OF PROPOSED Ph.D. PROGRAM IN EXPERIMENTAL PSYCHOLOGY

October 29-30, 2008

Prepared by

Dr. Narina Nunez, University of Wyoming

Dr. Craig Parks, Washington State University

Executive Summary

Our review of the materials prepared by the Idaho State University Department of Psychology, and visit to the department, lead us to **support** the proposed doctoral program in Experimental Psychology. Arguments in favor of the proposal are:

- The ability of the program to contribute to ISU's goals of increased research prominence and thematic excellence in health-based research;
- In-state need for professionals with expertise in experimental research methods, quantitative analysis, and content areas addressed by experimental psychologists, as evidenced by the creation of the Center for Advanced Studies in Energy and letters of support for the program from INL.
- National need for such professionals, as evidenced by job postings, increased applications to Experimental Psychology graduate programs in the Northwest, and near-100% placement of graduates from these programs;
- The ability to implement the program at minimal cost to the university.

Though implementation will be low-cost, the department will nonetheless need an immediate infusion of some resources, as well as to have longer-term needs be on the university's, and State's, radar. Department members will work to secure external funding to help support long-term needs. Immediate needs are

- Two new tenure-track faculty lines, to help alleviate the very heavy workload placed on current faculty. These new lines can potentially be realized through reallocation of open positions within the College of Arts and Sciences (CAS);
- Two additional graduate assistantships to support new Experimental students;
- A half-time administrative assistant, to pick up the increase in administrative tasks that will come with the new program.

Longer term needs are

- Additional new tenure-track faculty lines as needed. Possible support for these new lines could come from increased state funding for ISU's health mission.
- Additional physical space (office, laboratory) to accommodate new faculty and students. This need may be met through Psychology expanding to the sixth floor of Garrison House after Biological Sciences, which currently uses the sixth floor, moves into a new building.
- Additional graduate assistantships as the program grows. This need can at least partially be met through external research grants, though state-funded assistantships are also important, to provide students the opportunity to gain experience in teaching. The College and Department should also be encouraged to pursue development opportunities as they arise, and pursue donor funding for graduate fellowships.

In the following pages, we elaborate on these conclusions, and share additional recommendations. This summary, however, presents all essential points.

Background

In September 2008 we were contacted by Dr. Kandi Turley-Ames, chair of the Department of Psychology at Idaho State University, and asked to review the department's proposal for a doctoral program in Experimental Psychology, a review which included a visit to campus to meet involved individuals and see facilities. We were selected because our departments each offer the doctoral degree in both clinical and experimental psychology, and because we each have extensive administrative experience within our departments: Dr. Nunez was department chair for seven years, and Dr. Parks was director of graduate training for eight years.

We visited the campus on October 29th and 30th. On Tuesday we met with faculty members Brumley, Lawyer, Lynch, McCulloch, Prause, Roberts, and Wong; Graduate Dean Jackson; and interim Dean of CAS Hughes, as well as groups of undergraduate Psychology majors and graduate students enrolled in the doctoral Clinical and Master's Experimental programs. On Wednesday we met with faculty members Cellucci, Rasmussen, and Vik, and Associate Vice-Provost for Academic Affairs Adamcik; toured the department's facilities; and participated in an exit interview that included all participating faculty, the chair, and Deans Jackson and Hughes. Faculty member Letzring was unavailable to meet with us due to the birth of her baby one day before our visit, though Vik conveyed her enthusiasm for the proposal.

We were uniformly pleased with our meetings. The faculty and administrators were open and forthcoming, the students enthusiastic, and staff helpful. A 2004 external review of the department noted that the department is in good hands with chair Turley-Ames and support staff Lisa Coleman, and we heartily echo that sentiment.

Need

The most immediate question is whether a doctoral program in Experimental Psychology is even needed. The answer is a definite "yes." No such training is currently offered within Idaho, and among the WWAMI states only the University of Washington, Washington State University, the University of Wyoming, and University of Montana offer a doctoral degree in Experimental Psychology. Applications to these programs have steadily increased, though the number of students admitted into these programs has held constant. Thus, many well-qualified applicants are being turned away, and ISU would be able to compete for these students. Further, while we have no information about Montana graduates, graduates from the Washington, Washington State, and Wyoming programs have nearly 100% placement in their desired area of employment. The University of Idaho offers a Master's degree, with emphasis on human factors or organizational psychology, and neither Boise State University nor Lewis and Clark State College offer graduate training in psychology. The ISU program will not train in either human factors or organizational psychology, so there will be no duplication across universities.

ISU has received many letters of support for their program from the Idaho National Laboratory (INL), and review of these letters indicates an immediate need for experts in the types of topics for which ISU Psychology has expertise. Internal letters of support have also been received from the Informatics Research Institute and the Department of Special Education. While the department does not seem to have any connections with the state government, both of us have experience in our own states with our state governments recruiting and hiring students trained in Experimental Psychology. We expect something similar will occur with the Idaho state government once this program gets running. The Center for Advanced Studies on Energy, based in Idaho Falls, is another organization that would likely have an interest in the program's graduates. And this demand does not begin to consider the national need for experimental psychologists within the federal government, armed forces, higher education system, and private industry. All told, given the local and national need, the time is right for this program.

There is a key point to be made regarding the need for graduates at INL. We are aware that ISU has a satellite campus in Idaho Falls. As the relationship with INL develops, the temptation will emerge to offer occasional graduate courses, and perhaps even dedicated training, at this satellite campus. We **strongly discourage** such a step be taken. One of us (Parks) has ample experience with trying to coordinate graduate training across multiple campuses, and it is an inferior approach to doctoral education. The training is most effectively delivered at a single site at which all students and faculty reside.

Faculty

We met with faculty in three groups, each consisting of both Clinical and Experimental faculty. There seems to be genuine cameraderie within the department, and there is clear support for the proposal by the Clinical faculty. It was repeatedly emphasized that the two groups participate in training both Experimental and Clinical students; Clinical students do not only work with Clinical faculty, nor Experimental students with only Experimental faculty. This is a rather unique arrangement that offers advantages to students. The faculty show energy and enthusiasm, and a general vibrancy that is important for training of graduate students. In responding to some challenging questions from us, we saw that the faculty have thought carefully about the proposed program and are going into this with a clear vision and understanding of what lies ahead.

The Experimental faculty, who will make up the core of the program, are small in number but productive. For the most part they are early in their careers, though even the more senior faculty are still scientifically young. Their work is appearing in many top-quality journals. Examples include *Journal of Personality and Social Psychology, Psychophysiology, Journal of Applied Behavior Analysis, Memory and Cognition, Child Development,* and *Journal of Neurophysiology.* They are also quite active in preparation of grant proposals, with one proposal for $250,000 being funded by NIH, and three, worth a total of $1.1 million and submitted to federal agencies, in varying stages of review at this writing. Such energy and activity is exactly what is needed for training of graduate students. Their Clinical colleagues show similar levels of scholarly and grant-proposal productivity and quality, and as a whole this will create an excellent environment for Experimental student training. The grant activity will also help with the issue of student supports, in that faculty consistently include requests for research assistantships in their proposals. The addition of a PhD program in Experimental Psychology will undoubtedly increase the productivity and excitement among the current faculty, and should yield dividends for years to come.

Administrative Support

Each of the three administrators was open, thoughtful, and honest. All three are solidly behind this proposal, with none expressing any reservations. Each volunteered that s/he considers Clinical Psychology to be one of the top graduate programs at ISU, and a collective portrayal of the department emerged as productive, harmonious, and trouble-free. We heard things from each person that encouraged us. Dean Jackson considers the proposal to be perhaps the best that he has seen, and he sees the program as fitting into both ISU's expanding health focus and the president's desire to increase research visibility and graduate training. Dean Jackson believes that the department, not the Graduate School, should determine the expected time to completion of the doctoral degree. This is important because the median time to completion from Bachelor's to doctoral degree for an Experimental Psychology student is five years, not four years as is the norm in many disciplines. This indicates that, at least under Dean Jackson, the department will not be under pressure to push students out before they are ready. He is unconcerned about the loss of the Master's program in Experimental Psychology because it currently enrolls the same number of students that will be enrolled in the doctoral program.

Dean Hughes has only held his position since July, yet his interest in, and support of, the program is clear. He has spent considerable time with the chair, and was an active discussant during our exit interview. He indicated that, though he is an interim Dean, he intends to be active and make decisions that will enhance the college. He will be an ally as Psychology works to implement the program.

Vice-Provost Adamcik supports the program without reservation. She sees this proposal as building upon one of the university's strengths and she is ready to argue for the program. She definitely wants this proposal to go forward.

Students

The undergraduates are excited about this program and the department in general. Indeed, neither of us have experienced the level of devotion to a faculty that we saw in our meetings with these students, and it is clear that the faculty have worked very hard with them. There is no question that the program will receive a good number of applications from this group.

The students currently enrolled in the Experimental Psychology Master's program would very much like the opportunity to continue their post-graduate training here. We were also impressed by the depth of support evident among the Clinical doctoral students, and it is doubtful that there will be any friction between the two groups. Nonetheless, the faculty did ask us for advice on how to enhance and encourage mixing among Clinical and Experimental students.

Facilities

The facilities are adequate for expansion of the program. Faculty offices are decent, and it is possible to provide all students with office space. Research facilities are similarly fine, though the department is currently renting a vivarium in an adjacent building from Biological Sciences, and it would be preferable for the department to eventually own research space for the faculty who use animal subjects. This vivarium is certified by the Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC) and has an on-site veterinarian, the latter being an unusual and laudable feature.

As faculty are added, the department will quickly confront the need to accommodate new hires with office and lab space. The chair has approached Biological Sciences about moving into space on the sixth floor of Garrison House that is currently used by that department, and which should become available after Biological Sciences moves into its new facility. It is our understanding that an informal agreement is in place for such a transfer of space. If this indeed comes to pass, Psychology's needs should be satisfied for the immediate future.

The department has a teaching clinic at which the clinic director, Dr. Cellucci, and senior Clinical doctoral students see patients. Payment for services is on a sliding scale so the clinic is subsidized by the department (as are most teaching clinics throughout the country). The clinic has facilities for child, couple, and family therapy as well as individual adult therapy. Treatment rooms are equipped with video and audio recording devices, and one-way mirrors for observational purposes. We found the clinic well-designed for both therapeutic and research use. Experimental students will not likely be involved in provision of therapy, but they may well use the rooms for data collection, so this facility is important when considering the needs of these students.

The department provides two computer labs for students, and owns a poster printer. The department hires university technicians as needed to maintain the computers. It is unclear who is financially responsible for hardware upgrades. The department pays for software upgrades and poster-printer maintenance out of its own budget, and is responsible for repairing the printer. The computer labs have the latest statistical software installed (SPSS) and the department is in the process of trying to acquire a second popular package, SAS.

The classroom in Garrison House, and the department's conference room, are outfitted with appropriate technology: Projector with connections for a computer or document reader in the classroom, videoconferencing capability in the conference room. If the department uses classrooms other than the Garrison classroom for graduate instruction, we presume that those rooms are similarly equipped.

The department has multiple break rooms where faculty and students can mingle and socialize. As the faculty are concerned about fostering a sense of unity between the Clinical and Experimental students, this is not a trivial feature of their space.

Curriculum

The department proposes to build upon its existing core Master's curriculum. These students must complete one course each in statistics, experimental design, cognitive psychology, and social psychology, and then take one of three courses on biological psychology, and either developmental or personality psychology. They must also complete 12 credits of elective, with six of these coming from a field other than Psychology, and execute a thesis project. The doctoral curriculum will add five new required courses: Ethics, History and Systems, Learning, and two courses in advanced statistics and methodology. All but Learning are already developed and on the books, and members of the faculty have the necessary expertise to create the learning course. Students must also develop a specialization by earning 14 credits through some combination of seminars, external courses, and a Teaching of Psychology class. Finally, they will need to pass a comprehensive exam and complete a dissertation.

Completion of these requirements will result in the student earning 76 credits by graduation. Of these, 18 will come from the thesis and dissertation projects, which means the remaining 58 credits will come from formal classes. This is an extremely heavy load for an Experimental program, and we worry that students will not have adequate time to develop their research skills. While the result of taking so many courses would be admirably broad training, the faculty would be well-served to consider reducing the course requirements, perhaps by as much as half. In the next section of this report ("Considerations") we offer some recommendations for how this might be accomplished.

The extensive training in statistics and methodology is an attractive feature of the curriculum and will position graduates to address a pressing national need for experts in study design and analysis. Indeed, ISU would be the only program in the Northwest to require such concentrated training, and we expect their graduates who would want to market this expertise would quickly be in high demand both locally and nationally.

The faculty plan to employ a mentoring model for graduate training. Under such a model, a student enters the program primarily to work with one, or a small number of, faculty, and while undergraduate accomplishments are not ignored, admission decisions are heavily informed by the fit of a student's stated interest with the expertise of the faculty. By contrast, the Clinical program makes admission decisions using a generalist model, under which the best overall students are admitted, and those students gravitate toward particular faculty once they arrive in the

department. A mentoring model is appropriate for this program, and in fact is common within doctoral Experimental Psychology programs.

Considerations

There are particular aspects of the proposal that invite comment. None of these are shortcomings of the plan; rather, we offer these as issues that the core faculty should think about before implementation.

Curriculum. As we mentioned earlier, the number of needed courses is quite high. We worry that students will not have adequate time to develop their research skills and interests. As such, we suggest that the faculty discuss the number of requirements. Related to this, the faculty might consider scaling back the number of required courses. The current plan has students taking survey courses in five different content areas. It is unlikely that any student will find the material in all of these courses interesting, and that raises the question of how much the students will truly gain from taking such courses. The faculty might consider reducing this requirement, perhaps to enrollment in the survey course in one's area of interest, plus one other area. One can also ask whether History and Systems is truly needed, and whether all students will benefit from four courses in statistics and methodology. Our overarching suggestion is that the faculty consider moving away from a uniform, mandated curriculum and toward an elective curriculum tailored to the student's needs.

We also suggest the faculty think about how courses, and especially seminars, will be covered if the minimum enrollment target of 5 students cannot be met within the department. Two obvious solutions are to recruit graduate students from other departments, and to allow select undergraduates to enroll in the classes, though the department would want to screen these students carefully.

New Faculty Hires. The two new faculty hires will need to be in areas that complement the program's current strengths. We suggest that one hire be in cognitive decision-making. The letters of support from INL make clear that they need a number of experts in this area. A hire in this area would also compliment existing strangths in cognition and social cognition. Another area to consider is experimental health, broadly defined. There are scholars in physiological, social, cognitive, and developmental psychology who are all working on health-related questions, and who would fit nicely within the university's mission to emphasize health-related research. We would not recommend pursuing a traditional health psychologist, who would need access to special populations that the Pocatello area likely cannot provide. A traditional health psychologist would also add little to existing experimental strengths in developmental, social, cognitive, and physiological psychology. We would similarly not recommend considering an organizational psychologist. Besides overlapping with the University of Idaho, Pocatello really does not have the industrial base that such a researcher needs to be successful, and it does not have the curriculum in place for a graduate student who might be interested in pursuing an I/O career.

Organizational Structure. The faculty will want to define in advance the nature of the job of the director of experimental training (DET). Will this person be on an equal with the director of clinical training (DCT)? Are there responsibilities that the chair currently has that the DET will be expected to assume? Will the DET be given a course reduction to accommodate the duties of the job? If the position is not an annual position, who will handle graduate student needs and issues that arise during the summer?

The nature of graduate admissions should also be discussed. Will the application deadline date be synchronized across the Clinical and Experimental programs? What will be done if one program wants to change the application deadline and the other does not? How will admissions decisions be made? We are aware that the current model

involves all faculty considering and evaluating all applicants, but such an approach works much less well under a mentoring model, and one can have a situation in which faculty debate to what extent an applicant is a good fit for a particular faculty member. Also, if more faculty want to recruit then there are assistantship slots available, how will candidates be prioritized? The faculty may ultimately decide to keep the current approach, but we suggest they at least think about alternate models under which a faculty member takes the lead on recruiting, and arguing for, a particular applicant.

In conclusion, we support the proposed new doctoral program in Experimental Psychology and encourage it be approved as soon as possible. We appreciate the chance to participate in this process and share our thoughts.

ATTACHMENT 1

Subject: RE: ISU NOI
From: Kenneth Locke <KLOCKE@uidaho.edu>
Date: Mon, 30 Jul 2007 14:06:18 -0700
To: Katherine Aiken <kaiken@uidaho.edu>
CC: turlkand@isu.edu

Dear Kathy,
As requested, Kandi Turley-Ames (Chair of the Psychology Department at ISU) and I discussed the ISU NOI for a Ph.D. in Experimental Psychology. The following summarizes our mutual understanding of the issues; I am cc-ing Kandi to give her the opportunity to amend any misstatements on my part. Currently, ISU and UI both offer M.S. degrees in Experimental Psychology. The UI program offer specializations in the areas of Human Factors (HF) Psychology (ergonomics, biomechanics, human-technology interaction) and Industrial-Organizational (I/O) Psychology (workplace relations and productivity, job satisfaction, placement, and measurement). The ISU Experimental program specializes in complementary areas, including but not limited to cognition, learning, and areas linked to ISU's broader health mission. The plan outlined in the ISU NOI would not alter these respective foci: An ISU Experimental PhD program would continue to focus on areas of Experimental Psychology that complement, rather than overlap with, UI's HF and I/O emphases. Likewise, a UI Experimental PhD program would continue to focus on HF and I/O psychology so as to complement ISU's emphases. Each department has the capacity to provide doctoral training in some--but not all--areas of Experimental Psychology. Having focused doctoral programs in both departments would allow the State of Idaho to meet the needs of students interested in a range of specializations (and employers interested in hiring students with those specializations). Given these shared understandings and goals, the UI Psychology Department supports the ISU proposal.
Sincerely,
Ken

Kenneth Locke
Professor and Chair
Department of Psychology and Communication Studies
University of Idaho
Moscow ID 83844-3043
Office: (208) 885-4453
Fax: (208) 885-7710
www.class.uidaho.edu/klocke

Informatics Research Institute

Improving Operational Information
Through
Awareness, Training and Education
-- There is no patch for ignorance --

March 30, 2006

Professor Kandi Turley-Ames, PhD
Chair/Assoc Professor, Department of Psychology
Garrison Hall 422
Campus Box 8112
Idaho State University
Pocatello, Idaho 83209

Subject: Support for Program

Dear Professor Turley-Ames:

The purpose of this letter is to express support for an expansion of your present program into a Doctorate of Philosophy in Experimental Psychology. I believe Idaho State University, the state of Idaho and graduate students from multiple schools will benefit from this program. The development of students with research skills and the enhanced option of a focused study in the social, cognitive, behavioral, development, and physiological arenas will reward the state of Idaho for years to come.

This degree offering is timely and important as Idaho State University continues to mature in its research mission in the health related fields. This course will also assist our students with superior placement in the job market.

Further, I personally look forward to the opportunity to collaborate with our colleagues in the department of Psychology in providing such training. Please let me know how our programs can support your activities.

Sincerely,

Professor Corey D. Schou, PhD
University Professor of Informatics and Associate Dean, College of Business
Director, National Information Assurance Training and Education Center
Schou@NIATEC.ISU.EDU

BRIGHAM YOUNG
UNIVERSITY
IDAHO

28 March 2006

To the Idaho State Board of Education:

I am writing this letter to endorse the development of an Experimental Psychology PhD program at Idaho State University.

As Chair of the Brigham Young University – Idaho Psychology Department, I have occasion to speak with many of our students about their educational/career plans. I am aware that a significant number of our students intend to pursue graduate education in psychology. While the majority is focused on clinical and counseling careers, a sizable minority is interested in experimental psychology. As I have made them aware of the possibility of having an experimental PhD program at ISU, they have expressed interest in pursuing their graduate training at ISU. I believe we would consistently produce students who are both interested in and qualified for admission to ISU's Experimental Psychology PhD program if said program was approved and implemented.

Idaho has no doctoral level training in experimental psychology. The addition of a doctoral level program would be beneficial to the state. Idaho National Laboratory has expressed an interest in having doctoral level students in experimental psychology. The addition of a doctoral level program would be a boon for INL and for our students. Several of our undergraduate students have been involved with research at INL and are interested in pursuing experimental training in order to be qualified to work for INL. These students are established in Idaho and would prefer to remain in Idaho for their doctoral training.

I strongly support the development of an Experimental Psychology PhD at ISU. Please contact me if you have any questions.

Sincerely,

Christopher M. Lowry, Ph.D.

Christopher M. Lowry, Ph.D. *Chair, Department of Psychology*
110D Ricks Building, Rexburg, ID 83460-2140
Phone (208) 496-1352 · Email: lowryc@byui.edu

BRIGHAM YOUNG
UNIVERSITY
IDAHO

March 30, 2006

Dr. John Kijinski, Dean
College of Arts and Sciences
Idaho State University

Dear Dean Kijinkski,

I was just recently made aware of the proposed Ph.D program in Experimental Psychology at Idaho State University by the Chair of our Department of Psychology at Brigham Young University – Idaho, Dr. Christopher Lowry. He is quite enthusiastic about some of the potential benefits to our psychology graduates and perhaps for some faculty members. He forwarded to me a copy of the Notice of Intent for establishing the Experimental Psychology Ph.D program, so that I could familiarize myself with it and consider the possible benefits to our students.

I too, feel that this doctoral program would be beneficial to the students and possibly to some of the instructors at BYU-Idaho. As you are fully aware, we do not have graduate programs available at this university, therefore, any of our students who desire to pursue a graduate degree must go elsewhere. You also know that a graduate in psychology really needs to obtain a graduate degree to fully exercise and implement the principles of psychology he/she has learned. Having a Ph.D program in this area will attract a good number of our graduates.

I believe our psychology department does an excellent job in preparing their students for graduate school. A close coordination with and proximity to ISU could have a positive impact on those who desire to further their educational opportunities. Much encouragement will be given to our psychology graduates from our faculty members to participate in this Experimental Psychology program.

Increasing opportunities for employment at the Idaho National Laboratory for those with advanced degrees is another growing option for our students and indicates a need for this Ph.D program. The timing for this proposal seems advantageous.

I certainly endorse and applaud your efforts in seeking to establish this doctoral program in Experimental Psychology. It bodes well for our students and will be a source of new and beneficial opportunities for many people. We support you and thank you for your efforts.

Warm Regards,
Larry L. Thurgood, Dean

Idaho National Laboratory INL

March 28, 2006 204914

Dr. Kandi Turley-Ames
Department Chair
Psychology
Idaho State University
Campus Box 8112
Pocatello, ID 83209-8112

SUBJECT: Letter of Support for an Experimental Psych Doctoral Program at ISU

Dear Kandi:

I very much enjoyed the recent opportunity to meet you and your faculty. There are clearly a number of content areas where your faculty's interests overlap mine and the needs of the Idaho National Laboratory. As you described the plans to establish a PhD program, I and my colleagues all agreed that it should be done. Dr. Blackman has covered many of the institutional points with which I fully concur. I would like to speak more as a practitioner and individual contributor in mentioning the benefits that such a program would bring to me and my INL consulting and research.

During the twenty years I have worked at the INL, I have had the opportunity to supervise over 40 research assistants, primarily masters and doctoral students from Utah State University. Utah has excellent schools and programs. Why should I have to go to Utah to get this kind of specialized and valuable help? Why should Idaho talent have to leave the state to be developed? If a doctoral program in experimental psychology had existed in Pocatello, I would have looked first to engaging ISU students in my research and development projects. As Dr. Blackman pointed out, the area of Human Performance is receiving a great deal of attention within the Department of Energy and other government agencies, within Battelle as a corporation, and at the INL. Along with the cutting-edge research we have and will continue to do here in cognitive science, human-system interface, and human reliability, we are also very interested in refining and applying the principles we discover and applying them directly to our own research activities: we have been charged with leading the way in doing R&D on utilizing human performance in the R&D process. In summary, I am strongly supportive of a doctoral program at ISU.

Sincerely,

Robert E. Richards

Robert E. Richards, Ph.D. and Certified Performance Technologist
Performance Solutions Team Lead and member of the Center for Human Performance

Idaho National Laboratory INL

March 30, 2006 CCN: 204959

Dr. Kandi Turley-Ames
Department Chair
Psychology
Idaho State University
Campus Box 8112
Pocatello, ID 83209-8112

SUBJECT: Letter of Support for Doctor of Philosophy Program and Idaho State University

Dear Professor Turley-Ames,

I am writing to offer my support of your Notice of Intent to start a Doctor of Philosophy (Ph.D.) program at Idaho State University (ISU) in Experimental Psychology.

As a Department Manager in the Human Factors, Instrumentation and Control Systems Department at Idaho National Laboratory (INL), I lead a group of experimental psychologists that study how to improve human performance in high risk and high consequence work environments. Given the nature of our research, the INL has a need for Ph.D. experimental psychologists. Ph.D. experimental psychologists will have the requisite background in experimental research methods using human participants that we need to support our research. Moreover, a recently adopted hiring policy requires that candidates have a doctorate in experimental psychology, cognitive science, or Human Factors. The proposed Ph.D. program in experimental psychology at ISU would help address INL's need to find qualified candidates for permanent hire in my department.

The proposed Ph.D. program offers additional collaboration opportunities between ISU and INL. The INL has been in a strong position to fund student research. We have supported interns from Idaho State University, Vanderbilt University, and Brigham Young University-Idaho, and we are committed to exploring future funding opportunities for graduate students. We are also interested in collaborating with professors at ISU, particularly those in experimental psychology. They could facilitate connections between the INL's applied research interests and the ISU's research interests that are mutually supportive.

I strongly support the development of this Ph.D. program at ISU. If I can answer any question or provide additional information, please do not hesitate to contact me.

Sincerely,

Bruce P. Hallbert, Manager
Human Factors, Instrumentation and Control Systems
Idaho National Laboratory
PO Box 1625
Idaho Falls, ID 83415-3605

(208) 526-9867 voice
(208) 520-1185 blackberry
(208) 526-2777 fax
Email: Bruce.Hallbert@inl.gov

Idaho National Laboratory

March 29, 2006

CCN

Dr. Kandi Turley-Ames
Department Chair
Psychology
Idaho State University
Pocatello, Idaho

SUBJECT: Support for Idaho State University Doctor of Philosophy Program

Dear Dr. Turley-Ames:

I strongly support your efforts to develop a Doctor of Philosophy program in experimental psychology at Idaho State University. In my role as Deputy Associate Laboratory Director for Science and Technology at Idaho National Laboratory (INL) I see a growing need for such a program in our region. So much of our science and technology is deficient in addressing the link and interface with we humans. No such program in Experimental Psychology currently exists in the state of Idaho and this is clearly a gap that should be filled. At INL we are currently expanding in several areas that require this discipline and we are hoping that graduates of this program are prospective employees for INL. Ph.D. experimental psychologists will have the strong theoretical background in experimental research methods using human participants that will be a great asset and skill that we need to support our research. In addition, INL is interested and willing to provide support for collaborations with Idaho State University faculty and students as well as encouraging current employees to take advantage of this new Ph.D. program at Idaho State University.

We strongly support the development of such a program in our region, and would look forward to substantial collaboration with Idaho State University in this regard. If I can answer any questions or provide any additional information please do not hesitate in contacting me (208.526.0245).

Sincerely,

Harold S. Blackman

Harold S. Blackman, Ph.D.
Deputy Associate Laboratory Director
for Science and Technology

March 30, 2006

CCN: 204959

Dr. Kandi Turley-Ames
Department Chair
Psychology
Idaho State University
Campus Box 8112
Pocatello, ID 83209-8112

SUBJECT: Letter of Support for Doctor of Philosophy Program and Idaho State University

Dear Professor Turley-Ames,

I am writing to offer my full support of your proposed Experimental Psychology PhD Program at Idaho State University (ISU).

As a Project Manager in the Human Factors, Instrumentation and Control Systems Department at Idaho National Laboratory (INL), I am constantly aware of the lack of local qualified graduate students in Experimental Psychology, especially in Human Factors Psychology. When we at INL wish to enlist graduate students to support our research projects, we have had to look far to find qualified candidates with the requisite Human Factors coursework and research experience. Thus, our interns have typically come from institutions like the University of Maryland, New Mexico State University, and Vanderbilt University. A newly mandated minimum requirement for hiring permanent new staff into our department is that the candidate should hold a doctorate in Human Factors, Cognitive Science, or Experimental Psychology. As our department has hired new Human Factors Scientists, absent a local pool of qualified PhD students, we have directed our search to institutions outside Idaho. The proposed PhD program in Experimental Psychology at ISU would directly address INL's need to find qualified local graduate students for internships and potential permanent hire in Human Factors.

The proposed PhD program offers additional opportunities for collaboration between ISU and INL. Many of our research projects require several years of concentrated effort. While these programs are ideally suited for exploration within the course of a three to four-year dissertation, the brevity of the thesis for a terminal Master's in Experimental Psychology does not lend itself to tight integration with our research programs. If ISU is successful in establishing a doctoral program in Experimental Psychology, specific projects at INL would be in a strong position to fund student research, because the doctoral-level research would be more closely aligned with our research program needs. Departmentally, we have often expressed interest in drawing on a local pool of students for our research, but we have been frustrated that the short Master's degree has poorly matched our research timelines.

It is my understanding that the proposed Experimental Psychology PhD program might eventually result in hiring a full-time professor with a research specialization in Human Factors or Industrial/Organizational Psychology. Such an arrangement would open the door to even closer collaboration between INL and ISU. Such a professor would serve as a useful bridge between the highly applied psychological research common to INL and the more academically oriented psychological research at ISU. I foresee such a professor facilitating research between INL scientists and a

broad range of Psychology professors and graduate students at ISU. This facilitative role would allow a closer degree of collaboration than has been possible to date between ISU and INL.

The proposed PhD program also directly complements existing academic programs in the State of Idaho. For example, while the University of Idaho has a terminal Master's program in Experimental/Human Factors Psychology, students who wish to earn a doctorate in the field must look outside the region to complete their studies. The emergence of Brigham Young University-Idaho (BYU-I) in Rexburg as a four-year degree granting institution has presented a new cohort of Psychology students, many of whom will be looking for opportunities to continue their education at the graduate level while maintaining links to the area in which they earned their undergraduate degree. I have recently been involved as an adjunct professor offering senior-level coursework at BYU-I in Human Factors Psychology. Other BYU-I faculty have begun offering coursework in Industrial/Organizational Psychology. There is a very strong interest at BYU-I in having opportunities available for these students to continue their studies in applied experimental psychology.

I can see no downside to the development of a PhD in Experimental Psychology at ISU. Not only would such a program encourage closer interaction between two proximate strong research institutions in psychology at ISU and INL, and offer new opportunities for students to gain experience and funding, but it would also provide a needed much terminal doctorate for Experimental Psychology students across the state. I offer my full endorsement of this proposal and my assistance in bringing the program to fruition.

Sincerely,

Ronald Laurids Boring (PhD), Human Factors Scientist
Human Factors, Instrumentation and Control Systems
Idaho National Laboratory
PO Box 1625
Idaho Falls, ID 83415-3605

(208) 526-0966 voice
(208) 360-0402 blackberry
(208) 526-2777 fax
Email: ronald.boring@inl.gov

IDAHO STATE UNIVERSITY

College of Education

Instructional Methods & Technology Department

Campus Box 8059
Pocatello, ID.83209

Phone
208/282-3780

FAX
208/282-4826

Email
stricka@isu.edu

March 27, 2006

Dr. Kandi Turley-Ames
Chair, Dept of Psychology
Garrison Hall, Box 8112
Pocatello, ID. 83209

Dear Dr. Turley-Ames:

The Department of Instructional Methods and Technology, after careful review of the Idaho State Board of Education Notice of Intent proposed submission by the Department of Psychology for a Ph.D program in Experimental Psychology, enthusiastically supports this degree program.

During the past year Dr. Turley-Ames and other members of the Department of Psychology have provided invaluable support for students working in our department on various research projects. For the instructional Design NOI a number of graduate psychology courses were included in order to increase our student's knowledge and ability to address the needs of a diverse group of learners.

I believe the addition of PSYC 649 will add greatly to the knowledge base needed by our students.

I would hope that this degree program will lead to more collaborative projects between our two departments.

Sincerely,

A. W. Strickland, Ph.D.
Chair, Instructional Methods & Technology Department
Professor, College of Education

ISU Is An Equal Opportunity Employer

BRIGHAM YOUNG
UNIVERSITY
IDAHO

January 14, 2010

Dr. Kandi Turley-ames
Interim Associate Vice President for Academic Affairs
Idaho State University

Dear Dr. Turley-ames,

I appreciate the work being done to propose, and hopefully secure, a Ph.D program in Experimental Psychology at Idaho State University. This initiative was first brought to my attention by Dr. Christopher Lowry, who was serving as the Chair of the Department of Psychology at Brigham Young University – Idaho. He was quite enthusiastic about the benefits this program could have for some of our BYU-Idaho psychology graduates, and perhaps for some faculty members and other personnel. Since that time, Dr. Samuel Clay has assumed the chairmanship of the Psychology Department. He also feels that an Experimental Psychology program would be advantageous for BYU-Idaho students. I add my voice in support of the effort to establish this doctoral degree.

As you are fully aware, we do not have graduate programs available at BYU-Idaho, therefore, our students who desire to pursue a graduate degree must go elsewhere. A terminal degree of this nature would prepare its recipients for highly productive employment and facilitate greater educational and research opportunities. Our psychology department does an excellent job in preparing its majors for graduate school and close coordination with, and proximity to, ISU could have a positive impact on those who desire to expand these opportunities. Additionally, the Idaho National Laboratory provides employment opportunities for some of our graduates. A Ph.D program of this nature would likely attract some of them as they seek greater involvement with experience and knowledge in the human realm.

We have appreciated the academic relationship we have with Idaho State University. We look for every advantage to increase student awareness of, and encouragement to investigate and avail themselves of educational options, there, and in other locations. I believe an Experimental Psychology doctoral degree at ISU will provide such an option, and will enhance their employability, and the opportunity to contribute to society. The timing for this proposal seems advantageous.

I certainly endorse and applaud your efforts to establish this doctoral program. It bodes well for our students and will be a source of new and beneficial opportunities for many people. We support you and thank you for your efforts.

Warm Regards,

Larry L. Thurgood

Larry L. Thurgood, Dean
College of Education and Human Development

THIS PAGE INTENTIONALLY LEFT BLANK

UNIVERSITY OF IDAHO

SUBJECT

Notice of Intent to create a new administrative unit, Bi-State Department of Statistical Science and change existing degree name to Master of Science in Statistical Science.

APPLICABLE STATUTE, RULE, OR POLICY

Idaho State Board of Education Governing Policies & Procedures, Section III. G. 4. a. (1) (a) and b. (1)

BACKGROUND/DISCUSSION

The departments of statistics at the University of Idaho and at Washington State University have developed a close working relationship over the past 10 years. The departments share a number of cross-listed and cooperative courses as part of their M.S. degree programs, have joint colloquium series, and closely coordinate course offerings to the benefit of students at both universities. At a time when both institutions realize the need to leverage available resources and maintain statistical science program recognition, this proposal is highly regarded by both institutions' administrators and faculty are excited for the formation of the Bi-State Department of Statistical Science which will meet the necessary critical mass of faculty and students.

The University of Idaho Statistics Department and the Washington State University Department of Statistics request merger / consolidation of the two departments into a single (Bi-State) Department of Statistical Science across the two institutions. A precedent for such consolidation is found in the (consolidated) Food Science Department that resulted from merging the corresponding units of the University of Idaho and Washington State University.

IMPACT

The consolidation of the Statistics Departments of the University of Idaho and Washington State University does not require additional resources. Current resources (FY 2010, $667,452) will be more effectively, more efficiently, and more economically deployed. Students participating in the program will benefit from access to increased curricular breadth that results from the consolidation, increased exposure to faculty and program students from both universities, and from more coordinated professional and social activities and interactions. Program faculty will be able to increase the breadth of curricular offerings as a result of efficiencies created by the consolidation and will also have increased opportunity to collaborate on research efforts.

ATTACHMENTS

Attachment 1– Notice of Intent & Bi-State Department of Statistical Science Page 3

STAFF COMMENTS AND RECOMMENDATIONS

New administrative units are not listed on the Eight-Year Plan. The Council on Academic Affairs and Programs (CAAP), the Instruction, Research, and Student Affairs Committee (IRSA), and Board staff has reviewed the proposal and recommends approval.

BOARD ACTION

A motion to approve the request by the University of Idaho to create a new administrative unit, Bi-State Department of Statistical Science and change the existing degree name to Master of Science in Statistical Science.

Moved by _____ Seconded by _____ Carried Yes _____ No _____

Institution Tracking No. **ATTACHMENT 1**

IDAHO STATE BOARD OF EDUCATION

ACADEMIC/PROFESSIONAL-TECHNICAL EDUCATION

NOTICE OF INTENT

To initiate a

New, Expanded, Cooperative, Discontinued, program component or Off-Campus Instructional Program or Instructional/Research Unit

Institution Submitting Proposal: University of Idaho - Moscow

Name of College, School, or Division: College of Science

Name of Department(s) or Area(s): Statistics

Indicate if this Notice of Intent (NOI) is for an Academic or Professional Technical Program
Academic X Professional - Technical ____

A New Administrative Unit leading to: NAME: **Bi-State Department of Statistical Science**

DEGREE: **Master of Science in Statistical Science** (a change from "Master of Science in Statistics")

(Degree or Certificate)

Proposed Starting Date: Fall Semester 2010

For New Programs:

Program (i.e., degree) Title & CIP 2000

For Other Activity:

- [ ] Program Component (major/minor/option/emphasis)
- [ ] Off-Campus Activity/Resident Center
- [ ] Instructional/Research Unit
- [ ] Addition/Expansion
- [X] Consolidation
- [ ] Contract Program
- [ ] Other

College Dean (Institution)	3/2/10 Date	VP Research & Graduate Studies	3/16/10 Date
Chief Fiscal Officer (Institution)	10 Mar 10 Date	State Administrator, SDPTE	Date
Chief Academic Officer (Institution)	Date	Chief Academic Officer, OSBE	5/18/10 Date
President	4.16.10 Date	SBOE/OSBE Approval	Date

Before completing this form, refer to Board Policy Section III.G. Program Approval and Revised 8/9/06

Discontinuance.

1. Briefly describe the nature of the request e.g., is this a new program (degree, program, or certificate) or program component (e.g., new, discontinued, modified, addition to an existing program or option).

   The University of Idaho Statistics Department and the Washington State University Department of Statistics request merger / consolidation of the two departments into a single (Bi-State) Department of Statistical Science across the two institutions. A precedent for such consolidation is found in the (consolidated) Food Science Department that resulted from merging the corresponding units of the University of Idaho and Washington State University.

2. Provide a statement of need for program or a program modification. Include student and state need, demand, and employment potential. **Attach a Scope and Sequence, SDPTE Form Attachment B, for professional-technical education requests**. (Use additional sheets if necessary.).

   The Statistics Departments of the University of Idaho and Washington State University have a long history of curricular, faculty, and social cooperation. Merger of the two departments into single unit will allow for greater curricular integration and consolidation, personnel efficiencies, and will allow the resulting unit to better leverage both the combined and unique strengths of both universities. Additionally, merger of the two faculties will create greater research depth through increased collaboration in selected statistics specialty areas while retaining current breadth. It is anticipated that curricular and personnel efficiencies resulting from the merger will eventually enable creation of a unique doctoral program in Statistical Science that will strengthen the research fabric of both institutions. Consolidation will also better distribute existing statistical consulting expertise by making the combined expertise available to faculty, staff, and graduate student researchers at each university.

3. Briefly describe how the institution will ensure the quality of the program (e.g., accreditation, professional societies, licensing boards, etc.).

   The "program" already exists in a less efficient form as two departments at two institutions in two states with each department serving their host institution. While there are no accreditation or licensing boards for the discipline, there are multiple professional societies whose standards are clear, most notably the American Statistical Association. The program provides curriculum that is representative of those found in M.S. Statistics programs. Should consolidation occur, the consolidated unit is additionally considering formation of an advisory board composed of academics, alumni, and professionals. Moreover, program faculty members routinely examine offerings of similar programs to ensure currency. The Statistics Departments of the University of Idaho and Washington State University currently assess their programs annually and if consolidation is approved then assessment will continue in a hybridized form of those currently used by the existing units. Moreover, both UI and WSU require regular comprehensive program reviews with the next scheduled one at UI being approximately 2011.

4. Identify similar programs offered within the state of Idaho or in the region by other colleges/universities. If the proposed request is similar to another program, provide a rationale for the duplication. This may not apply to PTE programs if workforce needs within the respective region have been established.

   Regional masters programs in Statistics can be found at the University of Idaho, Washington State University, Montana State University, Brigham Young University, Oregon State University, and the University of Washington. No rationale for duplication is required. Instead, the request by the Statistics Departments of the University of Idaho and Washington State University is a merger of existing programs for the purpose of more efficient and cost-effective deployment of current personnel, curricular and other resources. Idaho State University offers a B.S. in Statistics through its Mathematics Department and the University of Idaho offers a B.S. in Mathematics with a Statistics option. Each of these latter two programs is a potential feeder to both the current Departments of Statistics at UI and WSU as well as the proposed consolidated department.

   Enrollment and Graduates (i.e., number of majors or other relevant data) By Institution for the Proposed Program Last three years beginning with the current year and the 2 previous years

Institution	Relevant Enrollment Data			Number of Graduates		
	2009-10	2008-09	2007-08	2009-10	2008-09	2007-08
BSU	None	N/A	N/A	N/A	N/A	N/A
CSI	None	N/A	N/A	N/A	N/A	N/A
CWI	None	N/A	N/A	N/A	N/A	N/A
EITC	None	N/A	N/A	N/A	N/A	N/A
ISU	None	N/A	N/A	N/A	N/A	N/A
LCSC	None	N/A	N/A	N/A	N/A	N/A
NIC	None	N/A	N/A	N/A	N/A	N/A
UI	13	11	11	8	7	5
WSU	32	28	28	15	11	17

Degrees offered by school/college or program(s) within disciplinary area under review

Institution and Degree name	Level	Specializations within the discipline (to reflect a national perspective)	Specializations offered within the degree at the institution
BSU	N/A	N/A	N/A
CSI	Associate	Applied Statistics	Within Mathematics
CWI	N/A	N/A	N/A
EITC	N/A	N/A	N/A
ISU	BS	Statistics	Statistics in Math Dept.
LCSC	N/A	N/A	N/A
NIC	N/A	N/A	N/A
UI	MS / BS	Applied & Mathematical Statistics	Statistical Consulting / Bioinformatics / Six Sigma
WSU	MS	Applied & Math. Statistics	

5. Describe how this request is consistent with the State Board of Education's policy or role and mission of the institution. (i.e.,centrality).

Among a handful of specific focus areas of the program are statistical consulting and research as applied to agriculture and natural resources. Consolidation of the UI and WSU Departments of Statistics into a single Bi-State Department of Statistical Science will more greatly enable increased focus on these areas. Already a number of (non-statistics) graduate students at both UI and WSU enroll in a significant number and variety of applied statistics courses as part of their academic programs and this is particularly true of graduate students in such areas as natural resources, forestry, bioinformatics and computational biology, education, and economics with this demand leading to the creations several years ago of graduate certificates in statistics and in six sigma innovation & design with the first certificate being broadly popular and the second certificate program being of greater interest to engineering graduate students.

As planned, consolidation of the two departments will enhance the research competence of both statistics and non-statistics graduate students. For statistics graduate students this is primarily accomplished in two manners, with the first being requirement of a truly substantive application area as part of the degree program and the second being through Statistical Consulting – the most commonly selected route to the M.S. Statistics degree. For non-statistics graduate students this goal is also generally accomplished through two primary means with the first being enrollment in statistics graduate courses and the second being use of the Statistical Consulting Center resources of either UI or WSU. A consolidated department will also consolidate statistical consulting resources, thus making a broader array of statistical expertise available to faculty, staff, and graduate student researchers at each institution and, also, to various public agencies and private businesses.

Consolidation of the two departments will likely lead to improvements in unforeseen ways that result in part from greater communication among statistically-inclined faculty members at each institution. Across the two universities Statistics Adjunct Faculty are rostered in such units including but not limited to the College of Agriculture, College of Natural Resources, Biology, Education, Economics, Fish & Wildlife Resources, Management, Engineering, and Geography. Similarly, a number of Statistics faculty members are adjunct faculty members in such units as Business, Psychology, Bioinformatics & Computational Biology, and Neuroscience. It is anticipated that communication and collaboration among statistics and statistically-inclined faculty will be amplified by the proposed consolidation.

6. Is the proposed program in the 8-year Plan? Indicate below.

Yes ____ No X

If not on 8-year plan, provide a justification for adding the program.

This is not a program addition, but rather a consolidation of the Statistics Departments of the University of Idaho and Washington State University that does not require additional resources. Instead, current resources will be more effectively, more efficiently, and more economically deployed. Students participating in the program will benefit from access to increased curricular breadth that results from the consolidation, increased exposure to faculty and program students from both universities, and from more coordinated professional and social activities and interactions. Program faculty will be able to increase the breadth of curricular offerings as a result of efficiencies created by the consolidation and will also have increased opportunity to collaborate on research efforts with program faculty from Washington State University as well as the potential for collaboration with Washington State University (non-Statistics) faculty, staff and graduate student researchers with whom they interact in the provision of statistical consulting. Researchers from both the University of Idaho and Washington State University will have access to a broader and richer array of statistical consulting capability and capacity, thus strengthening the overall research fabric of each institution. The State of Idaho and the State of Washington will benefit from improved deployment of present personnel, financial, and other resources funded in whole or in part through state appropriations.

8. Resources--Faculty/Staff/Space Needs/Capital Outlay:

NOTE: NO NEW FUNDS are required so that recorded figures are included for reference purposes only and reflect FY 2010 values as discussed in Footnote A.

Estimated Fiscal Impact	FY 2010[A]	FY 2011	FY 2012	Total
A. Expenditures	**CURRENT[A]**	No New	No New	No New
1. Personnel	$660,733	No New	No New	No New
2. Operating	$5,284	$1000	No New	No New
3. Capital Outlay	$1,435	$0	$0	$0
4. Facilities	$0	$0	$0	$0
TOTAL:	$667,452	$668,452	No New	No New
B. Source of Funds	**CURRENT[A]**			
1. Appropriated-reallocation	$667,452	No New	No New	No New
2. Appropriated – New	$0	$0	$0	$0
3. Federal	$0	$0	$0	$0
4. Other:	$0	$0	$0	$0
TOTAL:	$667,452	No New	No New	No New
B. Nature of Funds	**CURRENT[A]**			
1. Recurring *	$666,017	No New	No New	No New
2. Non-recurring **	$1,435	$0	$0	$0
TOTAL:	$667,452	No New	No New	No New

*** Recurring is defined as ongoing operating budget for the program, which will become of the base.**
**** Non-recurring is defined as one-time funding in a fiscal year and not part of the base.**

FOOTNOTE A: Figures reported for FY 2010 exceed actual outlay in order to reflect: **(1)** Fall 2010 return of a faculty member from sabbatical leave, **(2)** return to full-time status in the department of a faculty member from their three-year appointment as BCB Program Director, and **(3)** return from 0.50 to 1.00 FTE office support.

FOOTNOTE B: relevant figures for the Washington State University Statistics Department indicate:

- 1.09 FTE Staff
- 7.125 FTE Faculty that will be reduced to 6.625 FTE Faculty for AY 2010-2011
- Total FY 2010 Salaries are $616,838
- Total FY 2010 Operating Budget is: $5,320
- One Teaching Assistant is on Permanent Funding at $16,632
- Six Additional Teaching Assistants as "High Enrollment" allocations at 6 * $13,500 = $81,000

Frequently Asked Questions:

Consolidating the Statistics Departments of the University of Idaho and Washington State University to form a

Bi-State Department of Statistical Science

February 26, 2010

The Departments of Statistics at the University of Idaho and Washington State University propose consolidation to form a single "Bi-State Department of Statistical Science".

Although most benefits of consolidation will not be immediate, ultimately this effort – which is directed primarily at the graduate level – will create course and human capital efficiencies allowing both institutions and the students of each program to be better and more comprehensively served.

How will students be impacted by this change?

- This change provides seamless access to a more diverse graduate statistics curriculum across two institutions with the additional expectation that curricular integration and consolidation will gradually lead to redeployment of instructional resources resulting in new course offerings.
- Students will have increased access through both course and research participation to a broader array of faculty members that collectively provide both greater depth and breadth in key areas of statistics.
- Students will have access to more and more diverse statistical consulting experiences owing to consolidated statistical consulting efforts resulting from the formation of a single department across two universities.
- Students will have access to enhanced networking through increased seminar coordination and through alumni networks.
- It is anticipated that graduate students may experience some increase in movement across the two campuses but that coordinated scheduling and use of video-conferencing facilities will mitigate the effect.

Is accreditation impacted?

- Statistics is not subject to specific accreditation guidelines.

How will faculty be impacted by this change?

- Faculty members will likely see greater opportunities to enrich classes, including team teaching, segments taught by faculty from each institution, and students with collectively broader background in the classroom.
- Statistics faculty at UI and WSU will have increased opportunity to work with one another across institutional lines.

- Statistics faculty at each of UI and WSU should also experience increased opportunity to work with faculty and graduate student researchers outside Statistics from the other university in their research and outreach activities as a result of integrated statistical consulting efforts.

- While all details are not sufficiently resolved at this time, every effort will be made to insure that issues of faculty governance such as university representation and tenure and promotion will retain strengths that are inherent to our current system while exploring new opportunities that emerge from consolidation. One key enabler of this will be adoption of a joint set of by-laws that explicitly address these and other issues.

- Faculty will maintain control of curricula and instruction with increased integration of graduate curricula to occur subsequent to consolidation of the two departments. It is anticipated that lower-division undergraduate courses will be unaffected, but that some efficiencies may be gained at the 400-level.

- Faculty will continue to be represented on college and university committees and participate in other faculty opportunities. It is possible that some representation at the sister institution may ensue.

What has been done and what are the next steps?

- We are currently going through a fast track process in order to meet the deadline for the April agenda of the State Board of Education (SBOE).

- We have submitted a Notice of Intent – or NOI – to Provost Doug Baker so that he can begin the SBOE application process. It now will be processed through the normal faculty governance process. These are parallel processes in which the revisions resulting from the faculty governance process will be incorporated into the NOI submitted to Provost Baker.

- The NOI is not finalized until faculty comments have been incorporated, University Curriculum Committee and Faculty Senate have acted, and the SBOE/Board of Regents has approved it.

- The process also includes review and the feedback from the University community and the public.

- The NOI is the document that will eventually be approved by the SBOE to formalize the change. Here is the process:
    - University of Idaho and Washington State University Statistics Department faculty members met during early Fall Semester 2009 to evaluate the costs and benefits of consolidating the two departments into a single one. This idea was presented to the Dean of Science and Provost at each of UI and WSU for initial reactions, which were in all cases sufficiently encouraging. Adjunct / Affiliate faculty members at both institutions were invited to participate in the process.
    - University of Idaho and Washington State University Statistics Department Heads collaborated over the span from September 2009 – January 2010 to draft a merger proposal that was then revised and amended by a subcommittee composed of faculty members from each department.
    - The revised and amended merger proposal was then considered at a joint meeting of the faculty of the two departments held in early February 2010 wherein final revisions

to the proposal were made and unanimously accepted. Adjunct / Affiliate faculty members at both institutions were invited to participate throughout the process.
    - The merger proposal was submitted to the Dean of Science and the Provost of each University and the formal NOI document prepared, as informed by the merger proposal.
    - The NOI has been approved by the College of Science Curriculum Committee at UI and will be submitted to the University Curriculum Committee and Faculty Senate for approval.
    - It will be acted on by the SBOE/Board of Regents at the April meeting.

- Parallel processes on a similar schedule are advancing at Washington State University.

- Implementation of the consolidation:
    - Spring 2010
        - Move NOI through faculty governance and SBOE process.
        - Notify university community, students, constituents, etc.
        - Further refine implementation plan outlined in merger proposal.
    - Summer 2010
        - Prepare draft by-laws revisions for faculty governance process in fall.
    - Fall 2010
        - Faculty consideration and adoption of by-laws.
        - If required, revised by-laws to UCC and Faculty Senate.
        - Initial faculty discussion about opportunities for graduate curricular integration and innovation.
        - Coordinated course scheduling efforts.
        - Increased inter-institutional activities to reinforce single department identity.
        - Development of promotional materials and website.
    - Spring 2011
        - Continued dialogue about curricular opportunities.
        - Assess progress on faculty governance and make needed revisions.

What are some of the future changes the department will face?

- Recent prior assessment by the two departments over a two-year span indicated sufficient demand to merit an innovative new doctoral program in Statistical Science that will require a substantive application area wherein both the field of application and the field of statistics are enriched. It is anticipated that a proposal for a new Bi-State Ph.D. Program in Statistical Science will be submitted by 2013.

- Increased coordination and integration across the Statistics curricula will enable better use of instructional resources that will in turn provide opportunity to develop and introduce courses to support a Ph.D. program.

- At both institutions efforts are underway to better collect and coordinate statistics faculty resources through – where possible and desirable – joint appointment or adjunct/affiliate status of current faculty members.

- New faculty additions are anticipated over the next handful of years.

- **Examples that have already been discussed by the faculty of the UI and WSU Statistics Faculty:**

    - Delineation of what a Ph.D. program in Statistical Science should entail, course development needs, and identification of substantive application areas that leverage the institutional strengths of both UI and WSU. Ultimately the number of application areas emphasized will be limited to provide research focus, but ones specifically discussed have included but are not limited to: natural resources and environmetrics; econometrics; stimulation and enhancement of quality, productivity and innovation; and medical and health statistics.
    - A proposal for a unified "Inland Northwest Center for Quantitative Research and Analysis" is under consideration at both UI and WSU. This proposal was developed during Fall Semester 2009 by a committee composed jointly of UI Statistics faculty members and WSU Statistics and Mathematics faculty members. The INCQRA would primarily provide statistical consulting and would integrate the consulting resources of the (as currently constituted) UI and WSU Statistics Departments. This proposal was developed predicated on the consolidation of the two departments into a single Bi-State Department of Statistical Science.

    - Comprehensive assessment of upper division and graduate course content to minimize duplication and to reduce the current number of combined courses in a way that would enable development of new courses such that the eventual total number of courses remains at essentially the current level.

    - At the University of Idaho one faculty member that is presently 1.0 FTE in a single department will be 0.75 FTE in that department and 0.25 FTE in Statistics beginning FY 2011. Multiple similar discussions are underway at both UI and WSU as is the process of formalizing adjunct / affiliate faculty status.

    - A faculty search will be initiated during Spring Semester 2010 wherein a new faculty member will be recruited to the Statistics Department at UI and will be supported through cooperation with INL to provide funding for the position from a combination of federal grants and INL support.

Why make a change now?

- Higher education needs to respond to dramatic changes in funding, in society, in the rate of change in the world, and in the professional arenas our students will face when they graduate.

- Reduced state funding requires us to develop more efficient management structures, better deploy human capital, and make better use of present revenue streams while developing new ones.

Why consolidate the UI and WSU Statistics Departments: How does a single Bi-State Department of Statistical Science improve the *status quo*?

- This configuration best enables formal sharing of resources while reducing curricular and management structure redundancies.

- A single Bi-State Department of Statistical Science minimizes institutional barriers to cooperation and collaboration and provides better statistical consulting to faculty and graduate student researchers and better and a stronger and more diverse curriculum to program graduate students.

- At the same time, as currently configured, both departments have large undergraduate instructional service obligations. A single Bi-State Department of Statistical Science neither changes these obligations nor affects how these will be fulfilled. Undergraduate instruction is essentially unaffected by this configuration.

How were current students and alumni involved?

- Current Statistics students have been queried and are themselves in the process of conducting an alumni survey. Early indications are strong support for forming a single Bi-State Department of Statistical Science.

Is there concern about a culture clash?

The UI and WSU Statistics Departments have a decades long history of cooperation that includes curricular considerations, statistics seminar offerings, and social interaction. Critical considerations such as promotion and tenure have been historically been addressed in highly consistent ways and the general expectations of faculty members in the two departments has been similar. There are important distinctions including differences in standard teaching loads and graduate assistant compensation that will need to be addressed, but these are issues already under discussion in the event that a single Bi-State Department of Statistical Science is formed.

What is the financial impact?

- A single Bi-State Department of Statistical Science will ultimately reduce redundancies in management that, in turn, reduce some of the administrative workload in the college. It is expected that this will take some time to develop as working across two institutions introduces initial nuances that must be addressed before moving to a single Department Head structure.

- We're also looking at creative revenue sources, as are both the University of Idaho and Washington State University. We should have more information about those ideas in coming months, but one promising possibility is the aforementioned Inland Northwest Center for Quantitative Research and Analysis, a statistical consulting resource to both internal and external clients.

Have a question not answered? E-mail us at redgeman@uidaho.edu

UNIVERSITY OF IDAHO

SUBJECT

Notice of Intent to restructure the College of Education

APPLICABLE STATUTE, RULE, OR POLICY

Idaho State Board of Education Governing Policies & Procedures, Section III. G. 4. b. (1)

BACKGROUND/DISCUSSION

The College of Education is currently configured in four units (departments). The desire of the college is to reduce the overall number of departments to three. The department of Adult, Career and Technology Education (ACTE) will be discontinued. The two programs in ACTE (1) The Professional-Technical and Technology Education (PTTE) program is moving to the Department of Curriculum and Instruction (C&I) and (2) the Adult and Organizational Learning and Leadership (AOLL) program will move to the Department of Counseling and School Psychology, Educational Leadership (CASPEL). The three remaining units (C&I, CASPEL, and Health, Physical Education, Recreation and Dance, HPERD) will have the following focus areas respectively: teaching and learning, educational and organizational leadership, health and wellness. Unique unit names have not been determined and are in process. Additionally, the NOI requests changing the department name of CASPEL to Leadership and Counseling.

IMPACT

Reducing the number of departments in the college will position programs into thematic areas which will align programs with similar strengths and opportunities for future growth and development. Due to the state reductions in support it is necessary to capture savings from reduced administrative salaries and realignment of staff.

ATTACHMENTS

Attachment 1– Notice of Intent Page 3

STAFF COMMENTS AND RECOMMENDATIONS

Consolidation of an instructional unit would not be listed on the Eight-Year Plan; however, the request is being forwarded to the Board for consideration due to the fiscal impact of the request, which exceeds the required threshold permitted for Executive Director approval. Staff notes that the University of Idaho will also be making some specific curricular changes noted in the NOI, which will need to go through the regular program review and approval process per Board Policy III.G.

The Council on Academic Affairs and Programs (CAAP), the Instruction, Research and Student Affairs Committee (IRSA), and Board staff has reviewed

the proposal and recommends approval of the request from the University of Idaho to reorganize their College of Education with the understanding that specific program changes, as appropriate, will be forwarded to the Board office through a Notice of Intent as required in Policy III.G.

BOARD ACTION

A motion to approve the request by the University of Idaho to restructure the College of Education from four academic units into three academic units.

Moved by _____ Seconded by _____ Carried Yes _____ No _____

Institution Tracking No. _____

IDAHO STATE BOARD OF EDUCATION
ACADEMIC/PROFESSIONAL-TECHNICAL EDUCATION
NOTICE OF INTENT
To initiate a
New, Expanded, Cooperative, Discontinued, program component or Off-Campus Instructional Program or Instructional/Research Unit

Institution Submitting Proposal: University of Idaho
Name of College, School, or Division: College of Education
Name of Department(s) or Area(s): _____

Indicate if this Notice of Intent (NOI) is for an Academic or Professional Technical Program
Academic XX Professional - Technical _____

This is a New, Expanded, Cooperative, Contract, or Off-Campus Instructional Program, or Administrative/Research Unit (circle one) leading to:
The restructuring of the College of Education
(Degree or Certificate)

Proposed Starting Date: Fall 2010

For New Programs:

Program (i.e., degree) Title & CIP 2000

For Other Activity:

- [ ] Program Component (major/minor/option/emphasis)
- [ ] Off-Campus Activity/Resident Center
- [ ] Instructional/Research Unit
- [ ] Addition/Expansion
- [X] Discontinuance/consolidation
- [ ] Contract Program
- [ ] Other

College/Dean (Institution)	Date 2/22/10	VP Research & Graduate Studies	Date
Chief Fiscal Officer (Institution)	Date	State Administrator, SDPTE	Date 5/18/10
Chief Academic Officer (Institution)	Date	Chief Academic Officer, OSBE	Date
President	Date 4.16.10	SBOE/OSBE Approval	Date

Before completing this form, refer to Board Policy Section III.G., Program Approval and Discontinuance.

1. Briefly describe the nature of the request e.g., is this a new program (degree, program, or certificate) or program component (e.g., new, discontinued, modified, addition to an existing program or option).

The College of Education is currently configured in 4 units (departments). The desire of the college is to reduce the overall number of departments to three. The department of Adult, Career and Technology Education (ACTE) will be discontinued. The Professional-Technical and Technology Education (PTTE) program is moving to the Department of Curriculum and Instruction (C&I) and the Adult and Organizational Learning and Leadership (AOLL) program will move to the Department of Counseling and School Psychology, Educational Leadership (CASPEL).

The three remaining units will have the following focus areas: educational and organizational leadership, teaching and learning, health and wellness. Unique unit names have not been determined and are in process.

2. Provide a statement of need for program or a program modification. Include student and state need, demand, and employment potential. **Attach a Scope and Sequence, SDPTE Form Attachment B, for professional-technical education requests**. (Use additional sheets if necessary.).

By reducing the number of departments the college will be positioning programs into thematic areas which will align programs with similar strengths and opportunities for future growth and development. By moving the PTTE program into the C&I department economies will be realized with respect to course offerings in secondary teacher preparation. Due to the state reductions in support it is also necessary to reduce the number of departments the college has to capture savings from reduced administrative salaries and realignment of staff.

Restructuring the AOLL program into the department of CASPEL will allow for economies of scale with respect to leadership courses and will offer the opportunity to blend adult education with educational leadership and counseling. AOLL is the largest doctoral program on campus and the integration of faculties will allow more flexibility for students to build committees and spread the advising load more equitably across faculty. All current graduate programs will be retained and with the integration of AOLL a stronger faculty and focus on higher education leadership will be possible.

The reorganization will require the following adjustments to programs and departments which will be reflected in the UI catalog.

- ACTE, as a department, will be discontinued.
    - The current PTTE program will be moved to the department of curriculum and instruction.
        - The PTTE program title/prefix has been changed to CTE (Career and Technical Education), effective summer 2010.
    - The current ADOL program will be moved to the CASPEL department (see name change below).
        - The ADOL program title/prefix has been changed to AOLL (Adult, Organizational Learning and Leadership), effective summer 2010.
    - As a result of the integration of the AOLL program into the CASPEL department the CASPEL department will change its name to "Leadership and Counseling".

Specific curricular changes:

1.) Change the major in Professional-Technical and Technology Education (B.S.Ed.) to Career and Technical Education.
    a. Change the name of option b. from Professional-Technical Education to Occupational Education.
    b. Change the name of option c. from Technology Education to Engineering & Technology Education.

2.) Discontinue the major in Professional-Technical and Technology Education (M.Ed.). There are 16 students in this degree currently – they will be able to finish the degree as the courses required will be retained under the C & I department. New students who need this degree will not be impacted for employment or advancement due to the recognized CTE emphasis area under the C&I M.Ed.

3.) Create an emphasis area under the major of Curriculum and Instruction (M.Ed.) called Career and Technical Education.

4.) Drop the degree Education Specialist in Professional-Technical Education (Ed.S.P-T.Ed.) and its associated major of Professional-Technical and Technology Education. There are currently 5 (2 in the current term) students enrolled in this major, however it is to be retained as the Idaho Professional/Technical Leadership Academy uses this degree for leadership development. The unique courses will be retained under the department of curriculum and instruction.

5.) Create the degree Education Specialist (Ed.S.)

6.) Create the major of Curriculum and Instruction (Ed.S.)
   a. Create an emphasis area called Career and Technical Education. See attached program of study.

7.) Change the name of teaching minor in Technology Education (NOI pending approval from the SBOE) to Engineering and Technology Education.

8.) Move the following academic certificates:
   a. Certificate = Adult Basic Education/GED Instructor – Should move with the AOLL program to CASPEL.
   b. Certificate = Human Resource Development -- Should move with the AOLL program to CASPEL.
   c. Certificate = Technical Workforce Training – Should move with the CTE program to C&I.

3. Briefly describe how the institution will ensure the quality of the program (e.g., accreditation, professional societies, licensing boards, etc.).

Accreditation will not be threatened. By moving the PTTE program into the department of C&I, accreditation efforts across two units will be streamlined to one unit. The technological expertise which PTTE will bring the C&I unit will enhance and strengthen both the faculty capacity and position the unit to meet the changing technological requirements for preparing teachers. The ADOL program moving to CASPEL will increase the capacity of the department to meet the adult and higher education need of the state.

U of I has been awarded a grant to integrate both general education and professional / technical education for the last 5 years. The grant was focused on brining general education teachers and PTE teachers together in an effort to integrate content for improved student learning and retention

4. Identify similar programs offered within the state of Idaho or in the region by other colleges/universities. If the proposed request is similar to another program, provide a rationale for the duplication. This may not apply to PTE programs if workforce needs within the respective region have been established.

No other institutions have a similar departmental structure. Other institutions have similar programs but aligned appropriately for their institution. No other institutions offer a degree area in Professional Technical Education. No other institutions offer a degree in Adult and Organizational Learning.

Enrollment and Graduates (i.e., number of majors or other relevant data)
By Institution for the Proposed Program
Last three years beginning with the current year and the 2 previous years

Institution	Relevant Enrollment Data	Number of Graduates

	Current	Previous Year	Previous Year	Current	Previous Year	Previous Year
BSU						
CSI						
CWI						
EITC						
ISU						
LCSC						
NIC						
UI						

Degrees offered by school/college or program(s) within disciplinary area under review

Institution and Degree name	Level	Specializations within the discipline (to reflect a national perspective)	Specializations offered within the degree at the institution
BSU	UG	Secondary Education	
CSI			
CWI			
EITC			
ISU	UG	Secondary Education	
LCSC	UG	Secondary Education	
NIC			
UI			

5. Describe how this request is consistent with the State Board of Education's policy or role and mission of the institution. (i.e., centrality).

The University of Idaho has maintained a College of Education since 1920, the college programs are core to the mission of the university. The proposed changes strengthen the focus of the secondary education preparation program and provide additional opportunities for students seeking a graduate program in the leadership area.

6. Is the proposed program in the 8-year Plan? Indicate below.

Yes ____ No X

If not on 8-year plan, provide a justification for adding the program.

By reducing the number of departments the college will be positioning programs into thematic areas which will align programs with similar strengths and opportunities for future growth and development. Due to the state reductions in support it is also necessary to reduce the number of departments the college has to capture savings from reduced administrative salaries and realignment of staff.

8. Resources--Faculty/Staff/Space Needs/Capital Outlay. (Use additional sheets if necessary.):
The amounts below only represent the administrative costs – faculty costs are fixed and will not change respective to the department restructuring exercise.

Estimated Fiscal Impact	FY 10	FY 11	FY 12	Total
A. Expenditures				
1. Personnel	389,272	301,454	301,454	992,180
2. Operating				
3. Capital Outlay				
4. Facilities				
TOTAL:				
B. Source of Funds				
1. Appropriated-reallocation	389,272	301,454	301,454	992,180
2. Appropriated – New				
3. Federal				
4. Other:				
TOTAL:				
B. Nature of Funds				
1. Recurring *				
2. Non-recurring **				
TOTAL:	389,272	301,454	301,454	992,180

*** Recurring is defined as ongoing operating budget for the program, which will become of the base.**
**** Non-recurring is defined as one-time funding in a fiscal year and not part of the base.**

Curricular Requirements for Emphasis Areas in Career and Technical Education:

Degree: **Master of Education (M.Ed.)**
Major: **Curriculum & Instruction**
Emphasis: **Career & Technical Education**

Emphasis Area: (minimum of 12 credits, required for emphasis)
Career and Technical Education (CTE)
CTE 430 Leadership and Student Organizations (2cr)
CTE 431 Supervising CTE Student Organizations (1cr)
CTE 464 Career Guidance & Transitioning to Work (3cr)
CTE 551 Principles and Philosophy of CTE (3cr)
One of the following (3cr)
AOLL 573 Adult Learners: Foundations and Characteristics (3cr)
AOLL 574 Adult and Transformational Learning (3cr)
AOLL 575 Strategies for Facilitating Adult Learning (3cr)
Note: There are additional requirements for obtaining a CTE teaching credential at the secondary and post-secondary levels in the state of Idaho. See a CTE advisor for details.

Degree: **Education Specialist (Ed.S.)**
Major: **Curriculum & Instruction**
Emphasis: **Career & Technical Education**

Emphasis Area: (minimum of 24 credits, required for emphasis)
Career and Technical Education (CTE)
CTE 430 Leadership and Student Organizations (2cr)
CTE 431 Supervising CTE Student Organizations (1cr)
CTE 464 Career Guidance & Transitioning to Work (3cr)
CTE 551 Principles and Philosophy of CTE (3cr)
One of the following (3cr)
AOLL 573 Adult Learners: Foundations and Characteristics (3cr)
AOLL 574 Adult and Transformational Learning (3cr)
AOLL 575 Strategies for Facilitating Adult Learning (3cr)
CTE *Electives to total 24 credits in the emphasis.*
Note: There are additional requirements for obtaining a CTE teaching credential at the secondary and post-secondary levels in the state of Idaho. See a CTE advisor for details.

UNIVERSITY OF IDAHO

SUBJECT

Approval of Notice of Intent and Full Proposal to create a new Professional Science Master's in Natural Resources and Environmental Science

APPLICABLE STATUTE, RULE, OR POLICY

Idaho State Board of Education Governing Policies & Procedures, Section III. G. 5. a. 2. and 4.

BACKGROUND/DISCUSSION

The University of Idaho is proposing to create a new Professional Science Master's degree program (PSM) in Natural Resources and Environmental Science. The PSM is a designation that leads to professional standing as recognized by the Council of Graduate Schools. No such programs meeting the PSM designation presently exist within the state of Idaho. This degree creates an executive workforce with experience in real world problem solving, project development, financial and organizational management and effective scientific communication (which are not addressed in the traditional master's program) as underscored by employers in the public and private sectors. The degree will include nine interdisciplinary specialty tracks that will serve the job market in Idaho and the nation. Additionally, four transferable skills courses will provide training in professional aspects of applied science. Internships and research experiences will be tailored to individual student needs. The science tracks are each focused on a different issue in natural resources and environmental sciences.

IMPACT

The University of Idaho successfully competed in a field of well over 200 applications for about 20 National Science Foundation (NSF) awards. The $691,716 in grant funds from the NSF will fully support a total of 22 students on a competitive basis during the first 3 years of the PSM (6, 11, and 5 during each year, respectively). This support will be returned to the University in fees and tuition. Students not supported by NSF funding will be required to pay full fees or tuition and fees according to their residency status. The University should see net revenue income after the first year.

ATTACHMENTS

Attachment 2 – Full Proposal Page 3

STAFF COMMENTS AND RECOMMENDATIONS

This is a new degree program that leads to professional standing as recognized by the Council of Graduate Schools, and no such programs meeting the PSM designation presently exist within the State of Idaho. This program does not

duplicate, or overlap other Master of Science degrees in Idaho, and is appropriate within the University of Idaho's mission.

The University of Idaho's request to create a new Professional Science Master's degree in Natural Resource and Environmental Sciences is part of the update to their Eight-Year Regional Plan for Delivery of Academic programs in the Northern Region, which is slated for the August Board meeting. The Council on Academic Affairs and Programs has reviewed the proposal and recommends approval.

BOARD ACTION

A motion to approve the request by the University of Idaho to create a new Professional Science Masters degree program in Natural Resources and Environmental Science.

Moved by _____ Seconded by _____ Carried Yes _____ No _____

IDAHO STATE BOARD OF EDUCATION

ACADEMIC/PROFESSIONAL-TECHNICAL EDUCATION

FULL PROPOSAL

to initiate a

NEW, EXPANDED, COOPERATIVE, DISCONTINUED, PROGRAM COMPONENT OR OFF-CAMPUS INSTRUCTIONAL PROGRAM OR ADMINISTRATIVE/RESEARCH UNIT

Submitted by:

UNIVERSITY OF IDAHO

Institution Submitting Proposal

College of Graduate Studies

Name of College, School, or Division

Natural Resources, Waters of the West, Environmental Science

Name of Department(s) or Area(s)

A New, Expanded, Cooperative, Contract, or Off-Campus Instructional Program Leading to:

Professional Science Master's degree (PSM) in Natural Resources and Environmental Science

Degree/Certificate & 2000 CIP

Program Change, Off-Campus Component

Fall 2010

Proposed Starting Date

This proposal has been approved by:

Chief Fiscal Officer (Institution) — Date: 15 April 10

SBOE/OSBE Approval — Date: 6/8/10

Chief Academic Officer (Institution) — Date

President — Date: 4.16.10

Before completing this form, refer to "Board Policy Section III.G. Program Approval and Discontinuance.

1. Describe the **nature of the request**. For example, is this a request for a new on-campus program? Is this request for the expansion or extension of an existing program, or a new cooperative effort with another institution or business/industry or a contracted program costing greater than $150,000 per year? Is this program to be delivered off-campus or at a new branch campus? Attach any formal agreements established for cooperative efforts, including those with contracting party(ies). Is this request a substantive change as defined by the NWASC criteria?

There is an imperative in higher education to provide a technically educated, professional workforce for a national job market that is increasingly dominated by environmental issues related to concepts of sustainability. Policy makers across the country have emphasized the dual goals of economic growth and environmental sustainability. Between 1998 and 2007, jobs in the emerging green economy grew at a faster rate than jobs overall (9.1% vs. 3.7%), and recent research by the Pew Foundation shows that jobs in this sector are poised for even more dramatic growth. Idaho is one of 5 states where such jobs more than doubled during this time; green jobs in Idaho have an annual growth rate of 10.1%. These trends are underscored by the need of employers in the public and private sectors for an executive workforce with experience in real world problem solving and in project development, management, and finance. This is a request to develop a Professional Science Master's (PSM) program at the University of Idaho in natural resources and environmental science to meet the growing demand for an effective executive workforce in these areas.

The degree will include nine interdisciplinary specialty tracks and will emphasize translational science that will serve the job market in Idaho and the Northwest in the context of the emerging field of sustainability science. Borrowing from an educational trend in the health sciences, **we define translational science training as** a combination of curricula, research, and internship experiences specifically designed to transfer to students all aspects of relevant scientific information for a field, including theory, interpretation, and application. As part of this approach, each student will complete an internship through cooperation with a nonprofit, industry or business partner agency. Students will also participate in a research experience in the research programs of faculty affiliated with the key programs of the specialty tracks. **We define sustainability science as** science which includes the study of interactions between natural and social systems, and which also examines how these interactions determine societies' abilities to meet the needs of present and future generations. Thus, our vision for the PSM is to develop a professional workforce in natural resources and environmental science with an understanding of interdisciplinary sustainability science and the ability to communicate and work with others to apply this understanding to specific science-based problems faced by society.

The nine interdisciplinary science tracks are each focused on a different issue in natural resources and environmental science. These include Grassland and Shrubland Ecosystem Science, Wildland Fire Ecology and Management, Water Resources Management, Environmental Contamination, Sustainability Science, Climate Change Science, Restoration Ecology, Management of Regulated River Systems, and Ecohydrology Science and Management. All necessary science curricula are already in place as part of existing degree programs. Prior to matriculating the first students, we will have developed the necessary Transferable Skills courses to be used as a common core amongst all tracks. Internships and research experiences will be tailored to individual student needs.

A cluster of four Transferable Skills courses will be the core curriculum for all PSM tracks. The Transferable Skills courses are designed to address the specific needs of a professional science workforce that are not addressed in our traditional masters programs. As emphasized in reports from employers in a variety of science fields, these needs include training in the following areas: (1) financial and organizational management of scientific projects; (2) ethical reasoning in scientific research and practice; and (3) effective scientific communication, including scientific writing, intra-organizational communications and public speaking on scientific issues.

The PSM will be created as a single degree for the development of specialty tracks within natural resources and environmental science for two reasons. (1) The Transferable Skills courses and the emphasis on translational science will define the unique character of the degree regardless of specialty track. (2) Strong curricula for these tracks already exist at the University of Idaho, as evidenced by existing graduate degree programs in the various Colleges.

The four goals of the University of Idaho PSM degree program are:

Goal 1: Contributing to the National and Regional Workforce. We will provide a professional workforce for the environmental and natural resource science job market beginning in 2012, with the first students entering the PSM

program in fall 2010. We will work closely with businesses, industries, and agencies to continually assess the appropriate foci for the PSM program.

Goal 2: Producing a Workforce Equipped for the Scientific Challenges of the 21st Century. Our unique emphasis on sustainability science and translational science will help to prepare graduates of our PSM program to contribute immediately to the complex and challenging fields in which they will be employed. Much of the existing curriculum incorporates elements of sustainability science, and we will further develop this capacity through our existing intramural funding program, Greening the Curriculum. Each curricular track will be designed to reflect the training power of translational science. Students will not be trained solely in narrowly defined theoretical aspects or purely applied aspects of their chosen track; rather, students will receive training and education in a manner which will integrate the theoretical, professional, and applied aspects of their chosen field. Internships and research experiences will be selected and designed to complement this holistic, translational approach to science education.

Goal 3: Producing Science-Ambassadors Trained in Ethics and Effective Communication. The graduates of the PSM program at UI will be prepared to serve the scientific, professional, and broader communities through their training and educational background. In addition to the requisite management skills that will be part of the Transferable Skills courses, our program will place special emphasis on the development of written and verbal communication, including refining the students' abilities to communicate with the broader public. Developing an understanding of ethics and the cultural context where science and society intersect will be an integral part of all initial and future PSM tracks.

Goal 4: Producing Native Professional Scientists. While seeking students from all ethnic groups in Idaho, the University of Idaho will specifically recruit Native students for the PSM in order to meet the economic demand for Natives trained in science. UI has several programs that support Native students, and it is appropriate that we lead the way in training Native PSM students who can provide necessary scientific expertise to manage resources on tribal lands.

2. **Quality** – this section must clearly describe how this institution will ensure a high quality program. It is significant that the accrediting agencies and learned societies which would be concerned with the particular program herein proposed be named. Provide the basic criteria for accreditation and how your program has been developed in accordance with these criteria. Attach a copy of the current accreditation standards published by the accrediting agency.

a. As soon as the program is in place we will meet the standards to apply for membership in the National Professional Science Masters Association. Although this is the national professional organization for this type of degree, this group has elected not to develop licensing or credentialing standard because of the diverse array of PSM programs in existence and under development.

b. The University of Idaho PSM will be eligible for certification by the Council of Graduate Schools. We anticipate that approval will be forthcoming in Fall 2010 after the essential elements of the program are in place. This will permit the program to use the PSM logo for recruitment, which indicates our compliance with the national standards for the PSM. These national standards mandate that the degree program include: (i) an internship; (ii) as set of courses that provide added professional skills to the standard science training curriculum; (iii) total credits equivalent to a standard master's degree; (iv) a majority of the coursework in graduate-level science or mathematics courses; and (v) an employer based advisory board.

c. Students admitted to the PSM program must have a B.S. in biological, environmental, or natural resource sciences, or fields closely related to these sciences from an accredited university or college. Also appropriate are undergraduate degrees in Civil Engineering and Biological and Agricultural Engineering, depending on the interest area identified by the student. Closely related fields include botany, ecology, wildlife, fisheries, forestry, range science, and environmental sciences.

d. The PSM program will be advised by an external advisory board whose membership represents the agencies, industries, businesses, and non-governmental organizations that will employ our graduates. Feedback from these groups will be used to refine the PSM program.

e. Coursework in the PSM will be a unique mix of theory and applied science that is drawn from degree programs that are presently accredited and considered an integral part of the University.

Further, if this new program is a doctoral, professional, or research, it must have been reviewed by an external peer-review panel (see page 7, "Guidelines for Program Review and Approval). A copy of their report/recommendations must be attached.

a. Curriculum – describe the listing of new course(s), current course(s), credit hours per semester, and total credits to be included in the proposed program.

Program Components – 32 credits

Transferable skills courses – 12 credits
Science track courses – 12 credits
Elective science skills course – 3 credits
Internship – 3 credits
Research experience and seminar - 2 credits

The program will be completed in three semesters and a summer session, requiring no more than 18 calendar months to accrue 32 credits. The Transferable Skills courses and science curricula are described below. Internships will typically be conducted during the summer following the second (spring) semester. Internships must span a minimum of 6 weeks but may not exceed 10 weeks in duration. The research experience will be acquired through participation in faculty labs during the third and final (winter) semester. The number of 500-level courses necessary must meet the College of Graduate Studies (COGS) requirements. Additional COGS requirements relative to courses at lower levels apply.

Program administration. Program administration will be shared between COGS and the units allied with environmental and natural resource sciences tracks listed below. COGS will have ultimate responsibility for overall program administration, including administration of matriculation, admission requirements, and tracking of student credits through the program. The College of Natural Resources, Environmental Science, and Waters of the West (i.e., Water Resources) will be responsible for advising students within their respective tracks, creation and maintenance of relationships with internship sponsors, and creation of the research experience. COGS will designate admission requirements for the various tracks in consultation with the College of Natural Resources, Environmental Science, and Waters of the West. A PSM program coordinator working through COGS will work with the three overseeing units to facilitate internships, research experiences, and tracking of students.

Transferable Skills Courses (12 credits; 500 level)
The Transferable Skills (TS) courses, common to all PSM tracks, will be designed to address the specific needs of a professional science workforce that are often not addressed in a traditional master's program. As emphasized in reports from employers in the environmental and natural resource fields, these needs include training in financial and organizational management of projects, in scientific writing, and in speaking to the broader public about scientific issues (National Professional Science Masters Association, 2009). Fulltime students who are resident at the Moscow, ID campus will be expected to enroll in the classroom version of these courses, while online delivery will enable participation by students in remote locations. We expect online delivery of the TS courses to be implemented during the second year of operation after the classroom versions have been developed. Student fees will be used to defray the cost of distance delivery, while the in-class courses are staffed with faculty lines provided by the Provost (1 FTE for the 4 transferable skills course). The TS courses presently do not exist at the University of Idaho, and institutional resources will be dedicated to their development during spring and summer 2010. The TS courses will be listed as 500-level or 400-level courses as determined by the hosting college, which are the College of Business and Economics and the College of Letters, Arts and Social Sciences.
The Transferable Skills courses are:

Business Principles for Scientists I: Managing Scientific Projects *(3 credits, College of Business and Economics).* Modules in the first of two courses in management will engage students in the application of business principles needed to manage scientific projects in both the private and public sector with emphasis on accounting, financial, and scheduling concepts. Course topics include revenue and cost analysis, analysis of financial return, budgeting, project scheduling and capacity planning, risk management, and project control. Modules in each of the management courses will be interdependent and should be taken in sequence.

Business Principles for Scientists II: Strategic Management of Scientific Innovation *(3 credits, College of Business and Economics).* Modules in the second course in management will include the study

of business principles needed to manage scientific innovation in both the private and public sectors with emphasis on business strategy, organizational leadership, and marketing. Students will engage in active-learning exercises on developing systems and processes that support innovation, managing technical teams, managing organizational change, protecting intellectual property, the commercialization of scientific innovation, and the incorporation of environmental sustainability into organizational strategy and processes.

Communication and Science Writing for Science Professionals *(3 credits, College of Letters Arts and Social Sciences).* This course will provide students with the opportunity to develop vital professional skills in oral and written communication while preparing them to communicate clearly about science, policy, and technology issues with diverse and geographically-dispersed audiences. Content will highlight current research in mass media, science communication, and organizational communication to include strategic message development; persuasion, public opinion, and public policy; innovation and decision making; crisis communication and conflict management; emerging communication technologies; and inter-organizational and cross-disciplinary communication.

Ethical Practice in Environmental and Natural Resource Sciences *(3 credits, College of Letters Arts and Social Sciences).* This course will emphasize ethical dimensions of environmental and natural resource science in the context of globalization, global change, and climate change. The course will build on the communications skill set of the science communication TS course by including a module on the role of science in society. Students will be asked to critically evaluate the ethical dimensions of common scientific practice and issues.

Science Emphasis Areas (12 credits each; 400 and 500 level)
The PSM will be administratively housed within the College of Graduate Studies, while the College of Natural Resources, the Environmental Science Program, and programs in Water Resources will be responsible for the content, research experience, and internships for specific tracks. These multiple tracks are not intended to be degree programs; they are emphasis areas that allow the PSM students to tailor their education to their career goals. Students will choose a track as an emphasis area, and their faculty advisors will review the student's program of study to ensure that it reflects the goals of the PSM with respect to sustainability science and translational curriculum.

Elective Science Skills Course (3 credits). Students within each of the nine tracks will be required to take an elective 3-credit course that covers the scientific tools specific to their chosen track. The student's advisor and their sponsoring program, including the Environmental Science, the College of Natural Resources, the College of Engineering, and Waters of the West, will determine the appropriate skills course(s) for the student. Possible courses are found throughout the University's curriculum and may include courses in statistics, research methods specific to the chosen track, or a directed study with an advisor (e.g., the research experience described below may be expanded through a 500-level directed-study course to accommodate a customized set of skills).

I. College of Natural Resources. The College of Natural Resources is a nationally ranked research college that includes nationally and internationally renowned scholars in programs including forest resources, fisheries and wildlife, rangeland ecology and management, forest products, and conservation social sciences as well as interdisciplinary programs in wildland fire ecology and management and ecology and conservation biology. The College offers BS, MS, MNR, and PhD degrees. Academic programs within College of Natural Resources are based on science, integrated with research, and aimed at preparing well-educated professionals for careers in natural resource management. The College of Natural Resources is situated in the midst of federal, state, tribal, and privately held lands and offers many opportunities to combine hands-on fieldwork, internships, and research with academic programs.

A. Grassland and Shrubland Ecosystem Science. This track expands the existing non-thesis MS program in Rangeland Ecology and Management and will train students for employment in fields related to this program. Likely employers include industries associated with agroecosystems and livestock husbandry. Study in this track includes coursework that enhances both the scientific knowledge and applied skills of the PSM student. Students will be required to register for courses that focus on rangeland ecology, integrated range management, and soil development and classification. These students will be able to specialize through electives in landscape ecology, rangeland plant identification, or fire ecology related to rangeland. The translational approach will include experiences in both ecology and applied management of rangelands.

Grassland and Shrubland Ecosystem Science Curriculum
REM 452 Western Wildland Landscapes (1 cr.)
FOR 429 Landscape Ecology (3 cr)
REM 456 Integrated Rangeland Management (3 cr.)
REM 459 Rangeland Ecology (2 cr.)
REM 460 Rangeland Ecology: Current Topics and Field Studies (1 cr.)
REM 507 Landscape and Habitat Dynamics (3 cr.)
REM 527 Landscape Ecology of Forests and Rangelands (2-3 cr.)
REM 551 Rangeland Vegetation Ecology (3 cr.)
REM 560 Plant Ecophysiology (3 cr.)
CSS 572 Human Dimensions of Restoration Ecology (3 cr.)

B. Wildland Fire Ecology and Management. This track expands an existing certificate program in Wildland Fire Ecology and Management. It is intended to meet a growing demand for professional wildfire managers in the U.S. West (National Wildfire Coordinating Group 2009). Curricular elements in this track include courses in wildland fire ecology and management, fuels inventory and mapping, combustion, fire behavior and fuels management, prescribed burning lab, GIS applications in natural resources, remote sensing of the environment, wildland restoration ecology, and global environmental change. PSM students in this track will follow a translational curriculum that begins with the science of fire and extends through multiple aspects of fire management.

Wildland Fire Ecology and Management Curriculum
FOR 450 Combustion, Fire Behavior and Fuels (3 cr.)
FOR 451 Fuels Inventory and Management (3 cr.)
FOR 487 Fire Effects and Landscape Ecology (3 cr.)
FOR 486 Fuels, Fuels Management and Fire Science (3 cr.)
FOR 488 Fire and Land Management (3 cr.)
FOR 526 Fire Ecology (3 cr.)
FOR 530 Fire Regime Condition Class (1 cr.)
FOR 527 Landscape Ecology of Forests and Rangelands (2-3 cr.)
CSS 572 Human Dimensions of Restoration Ecology (3 cr.)
CSS 573 Planning and Decision Making for Watershed Management (3 cr.)

C. Restoration Ecology. Professionals trained in this PSM track will be prepared to work for consulting firms and agencies specializing in habitat remediation and restoration. Coursework in this track significantly expands on an existing certificate program offered by the College of Natural Resources and includes wetland restoration, landscape ecology, ecology of forests and rangelands, wildland restoration ecology, landscape and habitat dynamics, soil and environmental physics, fire ecology, and advanced soil chemistry. Students will be expected to participate in a practicum in restoration ecology as part of their research experience.

Restoration Ecology Curriculum
FISH 540 Wetland Restoration (3 cr.)
FOR 429 Landscape Ecology (3 cr.)
FOR 527 Landscape Ecology of Forests & Rangelands (2-3 cr.)
LARCH 480 The Emerging Landscape (3 cr.)
REM 440 Wildland Restoration Ecology (3 cr.)
REM 507 Landscape and Habitat Dynamics (3 cr.)
SOIL 415 Soil and Environmental Physics (3 cr.)
SOIL 528 Advanced Chemistry of Soil Environment (3 cr.)
CSS 572 Human Dimensions of Restoration Ecology (3 cr.)
CSS 510 Communications Theory in Natural Resource Management (3 cr.)

II. Environmental Science Program. The Environmental Science Program is a university-wide interdisciplinary curriculum that leads to BS, MS, and PhD degrees. The program draws on the participation of over 95 affiliate faculty holding primary appointments across the full range of the University of Idaho's colleges. Courses in the

program curriculum come from most sectors and disciplines of the University. Emphasis areas exist in Natural, Physical, and Social Sciences. The following tracks will be constructed within this framework, utilizing existing courses. Each track will include a capstone graduate seminar in which students will use the peer-reviewed literature to present a scholarly analysis of their research experience.

A. Environmental Contamination. Employment opportunities in environmental contamination are numerous in the Intermountain West owing to military, mining, and agricultural activities. This track will significantly expand an existing Environmental Science certificate program. Courses will be offered on bioremediation, hazardous waste management, risk assessment, pollution prevention, analysis of contamination, environmental regulations, environmental toxicology, pesticides, and environmental impact assessment.

Environmental Contamination Curriculum
BAE 450 Environmental Hydrology (3 cr.)
BAE 533 Bioremediation (3 cr.)
BAE 534 Applied Bioremediation (3 cr.)
CHE 570 Hazardous Waste Management (3 cr.)
CHE 580 Risk Assessment for Hazardous Waste Evaluations (3 cr.)
ENVS 428 Pollution Prevention (3 cr.)
ENVS 541 Sampling & Analysis of Environmental Contamination (3 cr.)
ENVS 579 Introduction to Environmental Regulations (3 cr.)
FST 509 Environmental Toxicology (3 cr.)
GEOG 544 Environmental Impact Assessment (4 cr.)
SOIL 438 Pesticides in the Environment (3 cr.)

B. Climate Change. This track builds on a new graduate climate curriculum in CNR and Geography, and is intended to address the need for professionals who understand not only climate science, but also specific issues related to impacts, mitigation, and adaptation. For example, several enterprises in the Intermountain West are concerned with biological carbon storage, while others are concerned with energy efficiencies and related carbon footprint issues. This PSM includes graduate courses in biogeography, bioregional planning, watershed science, climatology, land use, climate and water resources, spatial analysis and modeling, carbon cycle, energy systems, and global environmental change. Select graduate courses germane to mitigation and adaptation are taken from curricula in geography, forestry, plant science, soil science, business, and agricultural economics. Courses related to greenhouse gas reduction are taken from programs in bioenergy and bioproducts and the joint program in energy offered at the UI Idaho Falls Center in conjunction with the Department of Energy Idaho National Laboratory and the Center for Advanced Energy Studies. Using these facilities and faculty, the Environmental Science program is developing a graduate emphasis area in sustainable energy systems, and courses in this program will be available to PSM students in the climate change track.

Climate Change Curriculum
BIOP 520 Bioregional Planning Theory and Practice (3 cr.)
FOR 462 Watershed Science and Management (3 cr.)
GEOG 401 Climatology (3 cr.)
GEOG 420 Land, Resources and the Environment (3 cr.)
GEOG 435/535 Climate Change Mitigation (3 cr.)
GEOG 505 Climate and Water Resource Change (3 cr.)
GEOG 507 Spatial Analysis and Modeling (2 cr.)
GEOG 570 Global Carbon Cycle (3 cr.)
REM 450 Global Environmental Change (3 cr.)
CSS 510 Communications Theory in Natural Resource Management (3 cr.)
ENVS 501 Seminar in Climate Change (2 cr.)

C. Sustainability Science. Public and private agencies and businesses dealing with issues related to the management of environmental issues frequently lack professional expertise in aspects of coupled natural and human systems. This PSM track is intended to provide professionals for this growing field. This track builds on the existing Environmental Science curriculum in the social sciences and includes additional, existing courses with content relevant to bioregional planning, resource economics and policy, law and ethics, regional economic theory, risk assessment, pollution prevention, environmental regulations, natural

resources policy, environmental impact, population dynamics and distribution, conservation and social science, and public organization theory. Internships will be available through Sustainable Idaho, the outreach arm of the University of Idaho Sustainability Center.

Sustainability Science Curriculum
AGEC 532 Natural Resource Economics and Policy (3 cr.)
AGEC 577 Law, Ethics and the Environment (3 cr.)
AGEC 586 Regional Economic Development Theory (3 cr.)
CHE 580 Risk Assessment for Hazardous Waste Evaluations (3 cr.)
ENVS 428 Pollution Prevention (3 cr.)
ENVS 579 Introduction to Environmental Regulations (3 cr.)
FOR 585 Natural Resources Policy Analysis (2 cr.)
GEOG 544 Environmental Assessment (4 cr.)
GEOG 560 Population Dynamics and Distribution (3-4 cr.)
CSS 462 Natural Resource Policy (3 cr.)
POLS 554 Public Organization Theory (3 cr.)
WLF 440 Conservation Biology (3 cr.)
CSS 572 Human Dimensions of Restoration Ecology (3 cr.)
CSS 573 Planning and Decision Making for Watershed Management (3 cr.)
BIOP 520 Bioregional Planning Theory and Practice (3 cr.)
CSS 510 Communications Theory in Natural Resource Management (3 cr.)

III. University of Idaho Water Resources Programs. Water Resources programs at the University of Idaho include the Idaho Water Resources Research Institute and the interdisciplinary graduate program Waters of the West. The following tracks will be administered jointly bye Waters of the West and COGS in consultation with the other Water Resources programs. Faculty affiliated with these groups offer a wide array of research opportunities for PSM students, and each maintains relationships with agencies and industries dealing with water resource issues. Collectively, these programs will facilitate the following PSM science tracks that will be housed in the College of Graduate Studies.

A. Water Resources Management. This track expands an existing non-thesis MS degree program in Environmental Science to include a wider range of water management subject matter. This PSM track is intended to complement the more issue-specific tracks described below and will train professionals with the broader range of knowledge that is required to be an effective water resource manager. Students in this track will be trained for entry-level management positions in industries and agencies that offer a diversified portfolio in water resources management. Coursework for this track includes curricular elements that are currently part of the University's premier program in water resources, Waters of the West. Students will select courses that review wastewater operations, hydrology, water quality, watershed management, ground water engineering, water policy, water resources systems analysis, wetland restoration, remote sensing, geochemistry, and hydrogeology.

Water Resources Management Curriculum
BAE 450 Environmental Hydrology (3 cr.)
BAE 504 Environmental Water Quality (2 cr.)
CSS 573 Planning & Decision Making for Watershed Management (3 cr.)
ENVS 538 Western US Water Resource Policy & Environmental Equity (3 cr.)
ENVS 546 Drinking Water and Human Health (3 cr.)
FISH 540 Wetland Restoration (3 cr.)
FOR 462 Watershed Science and Management (3 cr.)
GEOG 524 Hydrologic Applications of GIS and Remote Sensing (3 cr.)
GEOL 564 Geochemistry of Natural Waters (3 cr.)
HYDR 512 Environmental Hydrogeology (3 cr.)
WR 506 Interdisciplinary Methods in Water Resources (3 cr.)
CSS 510 Communications Theory in Natural Resource Management (3 cr.)

B. Management of Regulated River Systems. Professionals trained in this PSM degree track will be able to work for a variety of agencies and firms in the West that specialize in aspects of regulated flowing water, especially including the major tributaries to the Columbia and Klamath Rivers. Graduate course work will expand the opportunities available through the Civil Engineering program, including courses in

riparian ecology, river restoration, engineering hydrology, open channel hydraulics, fluid dynamics, sedimentation, aquatic habitat modeling, channel flow, water resources systems analysis, stochastic hydrology and fluvial geomorphology. Students in this track will be trained for mid to upper range technical positions, and will be eligible for employment with industries and agencies that whose mission it is to manage regulated river systems, and consulting firms that provide technical support to these entities.

Management of Regulated River Systems Curriculum
FISH 415 Limnology (4 cr.)
FISH 515 Large River Fisheries (2 cr.)
FISH 430 Riparian Ecology and Management (3 cr.)
CE 421 Engineering Hydrology (3 cr.)
CE 428 Open Channel Hydraulics (3 cr.)
CE 504 River Restoration (3 cr.)
CE 520 Fluid Dynamics (3 cr.)
CE 521 Sedimentation Engineering (3 cr.)
CE 526 Aquatic Habitat Modeling (3 cr.)
CE 535 Fluvial Geomorphology (3 cr.)
CSS 573 Planning and Decision Making for Watershed Management (3 cr.)
CSS 510 Communications Theory in Natural Resource Management (3 cr.)

C. Ecohydrology Science and Management (jointly offered with CNR). Students trained in this PSM track will understand the interaction between the hydrological cycle and ecosystems, and be able to work at the interface between terrestrial and aquatic ecosystems. Students in this track will be trained for mid to upper level technical positions, and will be eligible for employment with consulting firms, federal and state agencies like the USDA and EPA, non-profit organizations, and tribal entities whose missions are to manage land and water resources at the landscape to regional scale. Graduate coursework will emphasize the mixed use of watershed landscapes and the coupling between human and natural systems.

Ecohydrology Science and Management Curriculum
BAE 450 Environmental Hydrology (3 cr.)
BAE 504 Environmental Water Quality (2 cr.)
FISH 415 Limnology (4 cr.)
FISH 430 Riparian Ecology and Management (3 cr.)
FISH 514 Fish Population Ecology (2 cr.)
FISH 515 Large River Fisheries (2 cr.)
FISH 540 Wetland Restoration (3 cr.)
FOR 462 Watershed Science and Management (3 cr.)
GEOG 524 Hydrologic Applications of GIS and Remote Sensing (3 cr.)
HYDR 512 Environmental Hydrogeology (3 cr.)
REM 440 Wildland Restoration Ecology (3 cr.)
REM 452 Western Wildland Landscapes (1 cr.)
REM 507 Landscape and Habitat Dynamics (3 cr.)
CSS 573 Planning and Decision Making for Watershed Management (3 cr.)
CSS 510 Communications Theory in Natural Resource Management (3 cr.)

Internships (3 credits)
The PSM program has made contact with several industries and agencies who are the primary employers of our alumni MS graduates or who are significant employers in fields allied with natural resources and environmental science. A total of 12 organizations have written letters of commitment to the PSM (allowed number appended) and indicated that they are willing and able to accept PSM students for internship experiences. These include state and federal agencies such as the National Park Service, the Bureau of Indian Affairs, the Rocky Mountain Research Station of the U. S. Forest Service, the Idaho Water Resource Board, and the Idaho Department of Environmental Quality. Private industry and non-governmental organizations that are willing to host our students include Simplot, CH2M Hill, Terra Graphics, the Nature Conservancy, and the Idaho Water Users Association. Letters of support from other industry contacts are pending but not listed here. Students in each track will be matched as closely as possible with an appropriate industry or agency for internship experience. Internships will be constructed in such a way as to provide students with a team-based, hands-on training experience that closely reflects the work of the industry or agency. Students will be required to establish learning goals and submit a

midterm and final report to a supervising instructor during the term of the internship. A formal presentation will serve as a summary report to faculty and peers at the end of the internship.

In many cases there will be considerable flexibility within an agency or industry regarding the structure and content of the internship. Whenever possible, we will match Native students with internships available with the Nez Perce Tribe operations in forestry and fisheries management (letter of commitment attached), or in an equivalent agency in their own tribe if such internships can be developed. Finally, in addition to external internships, we have considerable flexibility in providing internships through Sustainable Idaho, which functions as the outreach and engagement arm of the University of Idaho Sustainability Center. Sustainable Idaho routinely accepts contracts from industry (e.g., Boeing, Agribeef, and Beef Northwest) to evaluate industry practices for carbon and energy lifecycle analyses and sustainability assessments. Students will be able to conduct their internships through these contracts while working under the supervision of the Director of Sustainable Idaho and the Director of Environmental Science.

Research Experience (2 credits)
The team-based research experience for PSM students will be developed at field and laboratory sites managed by faculty at the University of Idaho. As such, the research experience will generally not be included in the internships described above, although internships may include research activities as part of the ongoing work at the sponsoring organization. The research experience will be designed for each student entering the PSM program in collaboration with participating faculty who will incorporate these students into teams in their ongoing research programs. The student's advisor will help the student identify an appropriate research experience and ensure that it is integrated with the student's science track. The Environmental Science program, the College of Natural Resources, and the University of Idaho Water Resources programs include faculty who have research programs that can provide a translational, problem-focused research experience across the range of science tracks described below. Students will receive graduate credit for participating in a semester-long research experience that will include a weekly seminar class where interdisciplinary faculty will mentor students in interpretation and application of research results. The seminar component of the research experience will focus on the integration of the experience with each student's science curriculum. A final written report will be submitted to the student's advisor.

b. Faculty – include the names of full-time faculty as well as adjunct/affiliate faculty involved in the program. Also, give the names, highest degree, rank and specialty. In addition, indicate what percent of an FTE position each faculty will be assigned to the program. Are new faculty required? If so, explain the rationale including qualifications.

In general, the faculty necessary to provision the PSM presently exist in affiliation with other programs at the University Idaho. The Provost has allocated 1 FTE in order to provide for faculty in the core Transferable Skills courses. The Transferable Skills course will require reassignment of existing faculty in the College of Letters, Arts and Social Sciences (0.5 FTE). The appointment of 1 adjunct faculty (0.5 FTE) will be required in the College of Business and Economics in order for existing faculty to teach the two management courses of the Transferable Skills set of courses.

Transferable Skills Courses

Name (%FTE) & Dept	*Specialty*	*Degree*	*Rank*
John Lawrence (0.5) CBE Bus & Eco	Strategy and Operations	Ph.D.	Professor
Douglas Lind (0.25) CLASS Philosophy	Philosophy	Ph.D.	Professor
Jodi Nicotra (0.25) CLASS English	Sci Writing & Communication	Ph.D.	Assist Prof

Science Emphasis Areas

All courses required for the nine tracks within natural resources and environmental science are presently taught by existing faculty members. These faculty members are drawn primarily from the College of Natural Resources, the College of Agriculture and Life Sciences, the College of Letters, Arts, and Social Sciences, and the College of Science. These Colleges are accredited by the appropriate accrediting agencies. The courses included in the curricula above are all existing courses that are regularly taught in service to existing MS and PhD degree programs.

c. Student – briefly describe the students who would be matriculating into this program.

Students enrolling in the PSM will come from a variety of different backgrounds, while all will be interested in the PSM as a "destination" degree that will not necessarily lead to the PhD. The job market serviced by this degree will include a variety of agencies, businesses, and industries concerned with natural resources and environmental science. At the end of three years we expect the PSM to include about 45 students per year. We anticipate participation from the following types of students:

1. Traditional full time students attending classes at the main University of Idaho campus in Moscow.
2. Place bound students who will take part of the curriculum via distance programming and attend some classes in person at UI.
3. Working professionals who are seeking an advanced degree. These students may be part time during any given part of their training. With approval, work experience may be substituted for the required internship.

d. Infrastructure support – clearly document the staff support, teaching assistance, graduate students, library, equipment and instruments employed to ensure program success.

Program manager, clerical staff and IT personnel: The PSM will require a Program Manager (0.5) who will be responsible for directing recruitment, admissions, establishing and maintaining internships, and identifying faculty advisors for students in the program. The Program Manager will also maintain relationships with outside stakeholders and direct the day-to-day operations of the program. In order to provide appropriate advising, administrator time will be allocated in the College of Natural Resources, Environmental Science, and Waters of the West at 0.125 FTE in each program. The PSM will be supported by one clerical staff (0.5 FTE). During the first three years the development of distance components and classroom video will be supported by IT personnel (0.25 FTE).

Graduate assistantships: After the first three years of NSF support, which includes significant funding for graduate student assistantships, all students will pay full fees for their status as either in-state or out-of-state.

Support personnel: Support scientists working for faculty at the University of Idaho will provide assistance to graduate students in the PSM program as they do to students in their respective programs.

Library: Current space, personnel, journal subscriptions (including electronic), and books in the University of Idaho library are adequate to support the disciplinary programs supporting the proposed PSM. The proposed PSM program adds a level of interdisciplinarity related to sustainability science that is highly supported by the library at the university level. The library will be responsible for two aspects of the PSM training program. These are (1) Informational Science Literacy skill seminars for the second in the series of Management courses, and (2) electronic support for e-books used in science tracks ($2,500 required for e-books during each of the first two years of the program).

Equipment and Instruments: Overall, no new facilities, equipment or technology will be required to initiate the proposed PSM. New computer server support will help the development of the distance component of the program as it is developed over the first year. Funds for this part of the PSM have been applied for through the SBOE ITIG competitive grants program. The Program Manager and clerical support staff will be based in available space in Morrill Hall as part of the College of Graduate Studies. IT personnel are presently based in the Commons. Because this is a graduate level program that involves faculty already actively teaching and mentoring students in several Colleges at UI, there will be no new laboratory or research facilities required. Publicity will be initially funded through the NSF grant for PSM initiation, and later from student fees. Existing classroom technology and space is adequate for the PSM. The graduate students in the PSM will have access to the facilities and equipment of most of our graduate level research and educational programs. This will enable a broad range of collaborative research and internship experiences for PSM students. The University of Idaho has extensive outlying campuses and research outposts throughout the state of Idaho, many of which are equipped with professional quality research, teleconferencing, computing, remote sensing, telemetry, geomapping, and analytical equipment. The UI has state-of-the-art laboratories for molecular biology, conservation genetics, stable isotopes, chemical ecology, GIS technology, social surveying, forestry, hydrology, and agricultural sciences at the main campus in Moscow, ID. Professional Science Masters students will have full access to UI housing, computing and research facilities, research vehicles, and field sites.

e. Future plans – discuss future plans for the expansion or off-campus delivery of the proposed program.

The PSM will be considered to be fully subscribed when 45 students a year participate in the program. Expansion of the program beyond this number will be assessed on the basis of demand and available resources. The PSM will be expanded during the first year to allow distance students to participate from anywhere in the world where Internet access supports the bandwidth necessary for interactive delivery of Transferable Skills courses and a variety of the science track courses.

Additional tracks may be added to the PSM in environmental and natural resource sciences as determined by student and employer demand, and resources available at UI.

3. **Duplication** – if this program is unique to the state system of higher education, a statement to that fact is needed. However, if the program is a duplication of an existing program in the system, documentation supporting the initiation of such a program must be clearly stated along with evidence of the reason(s) for the necessary duplication.

   Describe the extent to which similar programs are offered in Idaho, the Pacific Northwest and states bordering Idaho. How similar or dissimilar are these programs to the program herein proposed?

A Professional Science Master program does not presently exist in Idaho, and there are relatively few such programs in the region. Over 184 PSM programs exist nationwide, with more than 25 added in 2009 and equivalent growth expected in 2010. Fewer than 20 of these programs are in natural resources and environmental science. Our specific emphasis has no peer in the Pacific Northwest except the PSM in Environmental Sciences at Oregon State University.

We will offer the required components of the PSM degree program only from the Moscow campus of the University of Idaho, and we do not plan to offer the PSM through on-campus instruction in the Southwest or Southeast regions of Idaho, thus avoiding any duplication with academic graduate programs at ISU and BSU. Somewhat similar professional programs at Boise State University include a Masters of Health Science (Environmental Health) and a Master of Public Administration (Environmental and Natural Resources Administration). Both of these programs are in subject areas that are peripheral to the proposed degree program.

At Idaho State University there are two: a Master of Natural Science (MNS) in Geoscience and Biology available to students working toward a professional teaching certificate. Neither of these degrees is relevant to the proposed PSM, which does not include geosciences or biology, per se, and is not intended for teachers. At Idaho State University there are Master of Natural Science (MNS) programs in Geoscience and Biology available to students working toward a teaching certificate. Neither of these degrees is equivalent to the proposed PSM, and our program is not intended for teachers.

The University of Idaho has two non-thesis distance learning degrees that overlap somewhat with the PSM, an MS in Environmental Science and a Master's in Natural Resources (MNR). Although both degrees attract students in the environmental and natural resources sciences, neither has a curriculum that produces industry-ready specialists with the Transferable Skills offered by the PSM. In addition, both of these degrees are offered only online, and thus serve a different group of students than the PSM.

4. **Centrality** – documentation ensuring that program is consistent with the Board's policy on role and mission is required. In addition, describe how the proposed program relates to the Board's current Statewide Plan for Higher Education as well as the institution's long-range plan.

The missions of the University of Idaho include teaching, research and service. The broad objectives relating to these functions are: (a) to offer undergraduate and graduate academic programs of excellent quality in the liberal arts, the sciences, and many professional disciplines; (b) to add knowledge through research, scholarship, and creative activities in both fundamental and applied fields; and (c) to make readily available to all people of the State the results of research, including that in the arts and sciences. The proposed PSM is central to these goals in that it provides for a professional workforce in the applied fields related to natural resources and environmental science.

The University of Idaho historically has had certain unique functions. These include serving as: (a) the land-grant institution for the State of Idaho, with responsibility for instruction, research, extension, and public service in the fields of agriculture, forestry, mining, and engineering; (b) the graduate, research, and professional education center for the State; and (c) the center for comprehensive graduate programs leading to the degree of Doctor of Philosophy. The proposed program is consistent with the role and mission of the University of Idaho and specifically

addresses the university's responsibilities as a land-grant institution by providing a technically trained workforce in applied fields, including forestry.

The proposed program satisfies the State Board of Education's Statewide Plan for Higher Education by meeting the following goals and strategies as stated in Directions for Higher Education in Idaho: (a) it encourages expanded curricular response to the technologies; (b) maintains strong graduate education; and (c) continues to avoid unnecessary duplication of effort by utilizing existing course work in current programs. It also develops a broad range of cooperative ventures with agencies, businesses, and industries in the region. The PSM encourages the use of technology with respect to the tools that are used in fields related to natural resources and environmental science. It promotes Idaho's economic revitalization through providing a professional, technically-train workforce that is ready for the workplace upon graduation.

It is noteworthy that the proposed PSM is a natural outgrowth of the University's Strategic Action Plan for 2005-2010. The PSM specifically aligns with the teaching and learning objectives to (1) build and sustain a competitive advantage through innovative curricula of distinction, (2) expand partnerships with industry and emphasize active learning opportunities such as internships, and (3) provide graduate and professional students with integrated experiences in teaching, research, creative activity, and outreach. The PSM also variously supports objectives defined by UI goals for scholarship, and for outreach and engagement.

The University of Idaho is a natural choice to house such program because of its history of excellence in research and education in these fields. The College of Natural Resources, which will sponsor several PSM science tracks, is a nationally ranked research college with world-renowned scholars in programs including forest resources, fisheries and wildlife, and conservation social sciences. The Environmental Science program at UI is a strong, university wide interdisciplinary program that has excellent resources and opportunities available for students interested in science tracks related to Climate Change, Restoration Ecology, and Environmental Contamination. Our Water Resources programs include cutting-edge research stations and laboratories, such as the Center for Ecohydraulics Research, and will sponsor important science tracks in the PSM including Water Resources Management and Watershed Management and Ecohydrology.

5. **Demand** – address student, regional and statewide needs.

   a. Summarize the needs assessment that was conducted to justify the proposal. The needs assessment should address the following: statement of the problem/concern; the assessment team/the assessment plan (goals, strategies, timelines); planning data collection; implementing date collection; dissemination of assessment results; program design and on-going assessment. (See the Board's policy on outcome assessment.)

The University of Idaho is the land grant research and graduate training institution for the state. It serves a large and diverse region of the Intermountain West as well as the metropolitan economies of greater Boise, Pocatello, Coeur d'Alene, Idaho Falls, and Lewiston. Missoula, MT, Spokane, WA, and the Tri-Cities area of southeastern Washington are important secondary markets for UI graduates. Forestry, mining, fisheries, associated natural resource industries, and outdoor recreation comprise the largest part the regional economy related to natural resources and environmental science. Over 60% of Idaho lands are public, largely held by the U.S. Forest Service and the Bureau of Land Management. The U.S. Census Bureau identified Idaho as the sixth fastest growing state during 2007-2008, a ranking that the state has maintained since the 2005 census, despite reduced immigration during the current recession.

In October 2009, Economic Modeling Specialists, Inc. (EMSI) completed a market analysis commissioned for this proposal showing a significant potential for regional growth in the Pacific Northwest over the next five years in environmental and natural resource jobs. The anticipated jobs include professional positions associated with forestry, conservation, rangeland management, agricultural management, parks and recreation, wildlife biology, fisheries biology, geophysical technology, environmental engineering, environmental mitigation, environmental impact assessment, and waste management. Professional positions in these areas are projected to increase by 10.1% in Idaho and 9.4% regionally by 2014. These employment sectors currently support economic activity in Idaho, Oregon, and Washington at a rate 170% greater than a typical reference economy. In Idaho alone that value is closer to 250%. These values are projected to show little change through 2014, reflecting steady growth in these sectors of the economy as population increases over the coming 5 years.

The University of Idaho has a viable and compelling mission to produce a professional workforce. As of 2006, Idaho was in the bottom 15% of states ranked by percent of adult population 25 years and older holding professional or graduate degrees. Both Idaho and Nevada have 7.1%, exceeding only Arkansas, Louisiana, Mississippi, West Virginia, and North Dakota. The national average is 9.9%, led by populous states such as Colorado, Connecticut, Maryland, Massachusetts, New Jersey, New York, Vermont, and Virginia, each with more than 12%. In the Intermountain West, only Wyoming (7.3%) and Montana (7.9%) come close to the low graduate-degree rates of Idaho and Nevada (NCES, 2008).

b. Students – explain the most likely source of students who will be expected to enroll (full-time, part-time, outreach, etc.). Document student demand by providing information you have about student interest in the proposed program from inside and outside the institution.

The most likely source of students for the PSM in environmental and natural resource sciences are full-time and part-time students interested in an end-point or "destination" degree in this area that results in professional standing and does not necessarily lead to a Ph.D. Employers in the region will play a large role in determining which employees will seek additional training through the PSM. Employers are generally supportive of the PSM training model because it provides job-place ready personnel who require little additional training at the beginning of their employment. Many PSM students will be currently employed by agencies, businesses, or industries associate with fields relevant to this degree.

The National Research Council of the National Academy of Sciences issued a strong endorsement and call for PSM development in 2008 (*Science Professionals: Masters Education for a Competitive World*). The National Science Foundation issued a request for proposals in 2009, and UI successfully competed for $691,716 in funding in a pool of over 200 applications. The NSF program was funded by $15 million in funds from the American Recovery and Reinvestment Act ("stimulus funds"). The PSM concept has been endorsed by the Council of Graduate Schools, which provides certification for new programs in accordance with guidelines developed with funding from the Alfred P. Sloan Foundation and the National Science Foundation.

The explosive growth of PSM programs over the last ten years shows that these programs are extremely popular with students and employers. Over 170 PSM programs exist in more than 80 colleges and universities nationwide, with more than 25 added in 2009 and 25% growth expected by 2011. Fewer than 20 of these programs are in natural resources and environmental science, which in conjunction with the compelling market analysis cited above, suggests that this area is a niche that UI can successfully fill.

Differentiate between the projected enrollment of new students and those expected to shift from other program(s) within the institution.

The pool of applicants for the PSM will overlap minimally with students interested in a research-track MS with the possibility of leading to the Ph.D. According to the National Professional Science Masters Association, experience from programs throughout the nation suggests that there is a low likelihood of competition between the PSM and existing MS degrees.

c. Expansion or extension – if the program is an expansion or extension of an existing program, describe the nature of that expansion or extension. If the program is to be delivered off-campus, summarize the rationale and needs assessment.

6. **Resources** – fiscal impact and budget

On this form, indicate the planned FTE enrollment, estimated expenditures, and projected revenues for the first three fiscal years (FY) of the program. Include both the reallocation of existing resources and anticipated or requested new resources. Second and third year estimates should be in constant dollars. Amounts should reflect explanations of subsequent pages. If the program is a contract related, explain the fiscal sources and the year-to-year commitment from the contracting agency(ies) or party(ies).

I. PLANNED STUDENT ENROLLMENT

	FY 11	FY 12	FY 13

	FTE	Headcount	FTE	Headcount	FTE	Headcount
A. New enrollments	10	10	25	25	45	45
B. Shifting enrollments	0	0	0	0	0	0

II. EXPENDITURES

	FY 11		FY 12		FY 13	
	FTE	Cost	FTE	Cost	FTE	Cost
A. Personnel Costs						
1. Faculty	1.0	$ 87,881	1.0	$ 89,639	1.0	$ 91,431
2. Administrators	0.875	$ 51,000	.875	$ 52,020	.875	$ 53,060
3. Adjunct faculty						
4. Graduate/instructional assistants						
5. Research personnel						
6. Support personnel						
Clerical	0.50	$17,500	0.50	$17,850	0.50	$18,207
IT	0.25	$12,500	0.25	$12,750	0.25	$13,005
7. Fringe benefits		$57,030		$58,170		$59,334
8. Other:						
Total FTE Personnel And Costs;	2.625	$225,911	2.625	$230,428	2.625	$235,038

	FY 11	FY 12	FY 13
B. Operating expenditures			
1. Travel	$2000	$1000	$500
2. Professional services			
3. Other services			
4. Communications	$2,000	$2,000	$1,000
5. Utilities			
6. Materials & supplies	$2,000	$2,000	$2,000
7. Rentals			
8. Repairs & maintenance			
9. Materials & goods for manufacture & resale			
10. Miscellaneous			
Transferable Skills Courses Devel.	$4,000	$2,000	0
Development of Distance Learning	$3,000	$1,500	0
Total Operating Expenditures:	$13,000	$8,500	$3,500

	FY 11	FY 12	FY 13
C. Capital Outlay	0	0	0
1. Library resources	$2,500	$2,500	0
2. Equipment			
Total Capital Outlay:	$2,500	$2,500	0
D. Physical facilities Construction or major Renovation	0	0	0
E. Indirect costs (overhead)	0	0	0
GRAND TOTAL EXPENDITURES:	$241,411	$241,429	$238,538

III. REVENUES

	FY 11	FY 12	FY 13
A. Source of funds			
1. Appropriated funds -- Reallocation – MCO	$95,639	$0	$0
2. Appropriated funds -- New – MCO	0	0	0
3. Federal funds	$49,892	$48,332	$32,492
4. Other grants	0	0	0
5. Fees	$95,880	$239,700	$401,220
6. Other:			
GRAND TOTAL REVENUES:	$241,411	$288,032	$433,712

	FY 11	FY 12	FY 13
B. Nature of Funds			
1. Recurring*	$191,519	$239,700	$401,220
2. Non-recurring**	$49,892	$48,332	$32,492
GRAND TOTAL REVENUES:	$241,411	$288,032	$433,712

* Recurring is defined as ongoing operating budget for the program, which will become part of the base. ** Non-recurring is defined as one-time funding in a fiscal year and not part of the base.

a. Faculty and Staff Expenditures

Project for the first three years of the program, the credit hours to be generated by each faculty member (full-time and part-time), graduate assistant, and other instructional personnel. Also indicate salaries. After total student credit hours, convert to an FTE student basis. Please provide totals for each of the three years presented. Salaries and FTE students should reflect amounts shown on budget schedule.

The table below lists participating faculty, their annual salary (AY or FY for 2009-2010 AY), FTE assignment to the PSM program, program salary dollars, projected student credit hours, and FTE of students. Faculty position and affiliation are shown in the table on page 10. Assignment of FTE to the PSM program was estimated based on the involvement of the faculty in the delivery of the four Transferable Skills courses. Note that two of these courses (the Management series) will be taught by John Lawrence in the College of Business and Economics, whereas the other two courses will be taught by two individuals in the College of Letters Arts and Social Sciences. The Provost has provided funds FTE for these three faculty members through a separate allocation. Faculty salaries are assumed to increase 2% per year.

Name *	Annual Salary Rate ($)			FTE to PSM	Program Salary Dollars ($)			Projected Student Credit Hours			FTE Students		
	FY11	FY12	FY13	FTE	FY11	FY12	FY13	FY11	FY12	FY13	FY11	FY12	FY13
John Lawrence	107515	109665	111859	0.5	53758	54833	55929	60	150	270	5	12.5	22.5
Douglas Lind	84867	86564	88296	0.25	21217	21641	22074	30	75	135	2.5	6.25	11.25
Jodi Nicotra	51625	52657	53711	0.25	12906	13164	13427	30	75	135	2.5	6.25	11.25

* Position and rank are listed in table on page 10.

Project the need and cost for support personnel and any other personnel expenditures for the first three years of the program.

b. Administrative Expenditures

Describe the proposed administrative structure necessary to ensure program success and the cost of that support. Include a statement concerning the involvement of other departments, colleges, or other institutions and the estimated cost of their involvement in the proposed program

The table below shows the annual salary and program dollars required as a percent of annual salary for four administrative positions necessary for implementation and ongoing function of the PSM. A Program Manager will be responsible for publicity, recruitment, developing and maintaining relationships with external internships, externa advisory board development and annual meetings, and various day-to-day operations of the PSM. The Program Manager will also be responsible for logistics and scheduling of Transferable Skills courses and the development of capacity for distance learning throughout the curriculum. NSF funding during the first three years of the program will offset salary for the Program Manager. Thereafter salary for the Program Manager will be recovered from student fees and out-of-state student tuition associated with the program. Faculty within each of the three units (The College of Natural Resources [CNR], Environmental Science [EnvS], and Water Resources [WR, including Waters of the West]) associated with the PSM will be responsible for advising students who have chosen tracks within their respective units. Such advising will include identifying appropriate courses for a given track, and development of an appropriate research experience for each student. Individual faculty for these positions will rotate among faculty within each of the three units, and thus an average faculty salary of $68,000 is used as the basis for the calculations in the table below and in the budget estimates on page 15. These three individuals will have 0.125 FTE of their salary redistributed from existing duties with each of the three units.

Position	Annual Salary Rate ($)			FTE to PSM	Program Salary Dollars ($)			Percent of salary dollars to PSM		
	FY11	FY12	FY13	FTE	FY11	FY12	FY13	FY11	FY12	FY13
Program manager	51000	52020	53060	0.5	25500	26010	26530	50%	50%	50%
Faculty admin CNR	68000	69360	70747	0.125	8500	8670	8843	12.5%	12.5%	12.5%
Faculty admin EnvS	68000	69360	70747	0.125	8500	8670	8843	12.5%	12.5%	12.5%
Faculty admin WR	68000	69360	7074751	0.125	8500	8670	8843	12.5%	12.5%	12.5%

c. Operating Expenditures (travel, professional services, etc.) Briefly explain the need and cost for operating expenditures.

Operating expenditures include travel, communication, student recruiting, external advisory board meetings, and general office operating funds. NSF funds will offset these costs during the first three years of the program. NSF funds will be used for development of the Transferable Skills courses during the initial two years of the PSM. Development of distance delivery for the Transferable Skills courses will be implemented with NSF funds during the first two years of the program. These funds include 0.25 FTE for IT personnel during the first three years.

d. Capital Outlay

(1) Library resources

(a) Evaluate library resources, including personnel and space. Are they adequate for the operation of the present program? If not, explain the action necessary to ensure program success.

Through consultation with UI Library administration it is clear that there are adequate resources in terms of personnel and space for the Library to support the PSM.

(b) Indicate the costs for the proposed program including personnel, space, equipment, monographs, journals, and materials required for the program.

The PSM will impose no added costs with respect to Library personnel, space, equipment, monographs and journals. Included in the budget are the costs of e-Books that will be important for the Transferable Skills courses and aspects of the various specialty tracks.

(c) For off-campus programs, clearly indicate how the library resources are to be provided.

Library resources will be available to enrolled students via the internet.

(2) Equipment/Instruments

Describe he need for any laboratory instruments, computer(s), or other equipment. List equipment, which is presently available and any equipment (and cost) which must be obtained to support the proposed program.

Existing resources are adequate and available. Research laboratories of individual faculty members in their respective departments are adequate for the proposed program. No specialized research equipment will be needed to develop the PSM. There is a pending application for SBOE ITIG funds to support the development of computer equipment and software to support advanced distance delivery for the PSM and other programs at UI. The PSM can be implemented without this equipment, while funding will be sought to provide these resources as the program develops.

e. Revenue Sources

(1) If funding is to come from the reallocation of existing state appropriated funds, please indicate the sources of the reallocation. What impact will the reallocation of funds in support of the program have on other programs?

The Provost of the University of Idaho has promised 1 FTE to fund faculty who will implement the Transferable Skills courses. 0.5 FTE will be allocated to the College of Business and Economics, which is responsible for two courses, and 0.25 FTE will be allocated to each of two faculty members in the College of Letters Arts and Social Sciences, where the two remaining courses with be taught. At the end of 3 years the program will be evaluated for sustainability. The Provost will evaluate the impact of these funds on other programs in the context of fees and tuition generated by the PSM.

(2) If an above Maintenance of Current Operations (MCO) appropriation is required to fund the program, indicate when the institution plans to include the program in the legislative budget request.

(3) Describe the federal grant, other grant(s), special fee arrangements, or contract(s) to fund the program. What does the institution propose to do with the program upon termination of those funds?

Funding from the National Science Foundation totaling $691,716 will begin in August of FY 2011 and end on 30 June 2013. With funding derived from the American Recovery and Reinvestment Act of 2009, NSF envisioned this opportunity as a one-time competition for funds to initiate new PSM programs throughout the U.S. The University of Idaho successfully competed in a field of well over 200 applications for about 20 awards. These funds will fully support a total of 22 students on a competitive basis during the first 3 years of the PSM (6, 11, and 5 during each year, respectively). This support will be returned to the University in fees and tuition. Students not supported by NSF funding will be required to pay full fees or tuition and fees according to their residency status. Data from the more than 170 programs throughout the U.S. indicate that there is widespread demand for PSM programs and that students are willing to pay for access to this training. Our independent market analysis of the potential for employment in natural resources and environmental science in the geographic region supports this contention. The table below shows a scenario for income from fees during the first three years of the program. This does not include stipends and fellowship support supplied by NSF. FY 2014 in the table shows the estimated sustaining income from graduate student fees after NSF support has ended assuming a projected enrollment of 45 full-time on campus graduate students. The number of part time and distance learning students will possibly augment this amount as the capacity for distance delivery is phased in. According to the scenario below, the PSM will result in net revenue income to the University after the first year. Following termination of NSF funding, we expect to have developed a significant demand for this program and its continuance will be contingent on adequate numbers of fee-paying students.

Student category	Number of students 2011	Fees 2011 ($)	Number of students 2012	Fees 2012 ($)	Number of students 2013	Fees 2013 ($)
In state	6	33336	15	83340	30	166680
Non-resident	4	62544	10	156360	15	234540
Total	10	95636	25	239700	45	401220

SUBJECT

Idaho Technology Incentive Grant Program FY 2011 Award

APPLICABLE STATUTE, RULE, OR POLICY

Senate Bill No. 1207 Appropriations – College and Universities - System-wide Programs

BACKGROUND/DISCUSSION

The Idaho Technology Incentive Grant Program was created in 1997, and has since funded 213 projects at a total of more than $23.3 million. The Board was appropriated $1,151,100 from the Legislature for FY11, which may be used for instructional projects specifically designed to foster innovative learning approaches using technology, and to promote the Idaho Electronic Campus.

The program is designed to promote the creation and use of innovative methods of instruction that:

- focus on integrating technology into the curriculum;
- enhance the rate and quality of student learning;
- enhance faculty productivity; and
- increase access to educational programs.

Funding is awarded by the Board through a Request for Proposals (RFP) and is based on the overall merit of the proposals. Proposals are not automatically funded. The total number of projects awarded to each institution is determined by the Idaho Technology Incentive Grant Program Review Committee's evaluation. Additional projects may be funded if other institution's proposals fail to show merit or fail to meet the criteria of the RFP.

The proposals are evaluated by the Idaho Technology Incentive Grant Program Review Committee, which consists of the following:

- Milford Terrell, from the Board's Business Affairs and Human Resources Committee
- Superintendent Luna's representative; Jimmy Takata, Department of Educational Technology Coordinator;
- Greg Zickau, representative from the State Information Technology Resource Management Council; and
- Dale Bower, the Board's Chief Academic Officer.

The committee met on March 30, 2010 to review the proposals and to formulate recommendations to the Board.

IMPACT

Funding was recommended for 13 projects based on the merit of the applications.

ATTACHMENTS

Attachment 1 – FY11 Idaho Technology Incentive Brochure Page 3

STAFF COMMENTS AND RECOMMENDATIONS

The Evaluation Committee, Board staff and the Instruction, Research and Student Affairs Committee (IRSA) recommends $1,000,000 for the following projects. The remaining funds will be applied toward state technological educational initiatives.

Proposal No.	Institution	Project Title	Dollar Amount
T11-005	UI	Making the Impossible: Changing the Educational Landscape with 4D Virtual Learning	$121,800
T11-007	UI	Developing a University-wide Multimedia Instructional Resource (MIR) at the University of Idaho	$159,500
		Total for the University of Idaho	**$281,300**
T11-014	LCSC	Creating Innovative Multimedia content with Camtasia Relay	$39,900
T11-015	LCSC	Expanding Simulation in the Division of Nursing and Health Sciences	$91,500
T11-016	LCSC	Histologic Preparation of Tissue Specimens	$44,000
		Total for Lewis-Clark State College	**$175,400**
T11-018	ISU	Growing Your Own: Developing a Virtual Classroom for Clinical Instruction in Rural Idaho	$65,700
T11-023	ISU	Education Modules using Virtual Museum and Collections for K-12 and University Instruction in Idaho History & Culture	$135,700
T11-025	ISU	Technology Enhanced Business Education	$81,000
		Total for Idaho State University	**$282,400**
T11-028	BSU	Em-PoWer-ing Student Success Through Video Tutorials	$24,700
T11-030	BSU	Development of a Biomolecular Immunology Lab Course: Integrating Advanced Technology, Bioinformatics, and 3-D Molecular Visualization	$19,800
T11-032	BSU	Improving Faculty Effectiveness: Syncing Student Feedback with Digitized Lecture Performance	$38,300
T11-033	BSU	Open Source Enterprise Lecture Capture Solution	$114,700
T11-037	BSU	Moving the Best Practices of Writing Pedagogy into the Online Classroom	$63,400
		Total for Boise State University	**$260,900**

BOARD ACTION

A motion to approve funding of review committee recommended projects under the Idaho Technology Incentive Grant Program for FY2011 totaling $1,000,000 as submitted.

Moved by_____ Seconded by_____ Carried Yes_____ No_____

FY 2011
IDAHO TECHNOLOGY INCENTIVE GRANT PROGRAM FUNDED PROJECTS

The purpose of the ITIG is: to focus on integrating technology into the curriculum; to enhance the rate and quality of student learning; to enhance faculty productivity; and to increase access to educational programs.

University of Idaho Projects

Making the Impossible: Changing the Educational Landscape with 4D Virtual Learning

C. Brian Cleveley
$152,800

The "Connecting Educators Across Idaho Using Virtual Worlds" grant team will build upon the first phase of a project which was to promote and implement the increased use of virtual world technology in online education across the state through expanding Second Life® virtual campus and providing "How to use Second Life®" workshops to educators. The second phase of the project, which includes the innovation use of the virtual world to deliver education in ways cost prohibitive or impossible for the real world. Phase two will translate classroom methods and develop new interactive techniques that can only be delivered in the virtual. The new methods created from this especiation will inform both the contemporary as well as the evolving pedagogy of learning experiences and outcomes.

The PIs will create and pilot two simulations, Financial Literacy and Nutrition Education. These were identified because they address two very significant national issues facing students and Idaho residents of all ages in rural and urban locations. The simulations will be used to meet the following goals:

1. Educate students on the importance of good nutrition and healthy dietary decisions.
2. Educate students on the importance of sound personal fiscal management decisions.
3. Support six members of the education community to incorporate the use of the simulations identified in point 1 and 2 above, into their classrooms.
4. To design, build and promote a virtual Idaho education community to modern educators and students across our state and beyond.

Developing a University-Wide Multimedia Instructional Resource (MIR) at the University of Idaho

Michael Johnson
$121,800

This project will create a new generation Multimedia Instructional Resource (MIR) at the University of Idaho that will provide a central repository and server system for multimedia material, while enhancing UI's commitment to the distributed innovation and development model of distance learning and collaborative research materials. This new generation of hardware and software is essential to update the existing inefficient and incompatible system of servers, and to integrate resources across the university with those of other universities. The MIR project will service the University's newly redeveloped and expanded suit of distance education courses and provide materials to the Idaho Education Network and other educational organizations in Idaho. The program will be sustained beyond the funding period through program fees charged to distance students. Although the MIR will be available to and beneficial to all units at the University of Idaho, the initial motivation for its creation is to support the new Professional Science Master's (PSM) program, a workforce development program which will include curriculum delivered through distance learning format.

Lewis-Clark State College Projects

Creating Innovative Multimedia content with Camtasia Relay

Carolyn Quintero
$39,900

This project promotes further technology integration into the curriculum through faculty training and professional development in Camtasia Relay, a recording device that allows for the creation of innovative, on-demand multimedia.

The acquisition and implementation of Camtasia Relay on the LCSC campus will:

- Focus integration of technology into the curriculum
- Enhance the rate and quality of student learning via media rich course content
- Enhance faculty productivity and efficiency when creating course content
- Increase student access to educational content via on-demand media recordings

Camtasia Relay recordings bring "hands on" course content to the online learning community with ease, providing students increased access to a variety of educational programs offered at LCSC. Faculty will be able to record lecture presentations, digital slideshows, web sites, examples of complex problems, or anything else on a computer screen, all enhanced with narration.

Expanding Simulation in the Division of Nursing and Health Sciences

Michelle Pearson-Smith
$91,500

This project will use patient simulators to provide realistic anatomic and clinical functions which permit students to learn complex nursing skills in an environment where they receive immediate feedback. The use of this technology will be used for skill development and application and as a replacement for a portion of on-site clinical hours. Continuation and extension of this technology in the Bachelor of Science (BSN) and Practical Nursing (PN) curricula will allow for more efficient use of clinical facilities and provide students exposure to technological advancements encountered in the work environment. Further, utilization of simulation equipment in laboratory and clinical settings will attract students to and retain them in nursing programs.

Histologic Preparation of Tissue Specimens

Heather Henson-Ramsey
$44,000

The Lewis-Clark State College Division of Natural Sciences proposes an innovative approach to help students understand the relationship between histology slides and actual structures in animals and plants. Acquisition of a tissue processor, tissue embedder, and a microtome will provide students with the technology required to prepare histology slides themselves. By creating their own slides, students will gain a greater understanding of normal and diseased anatomy of both plants and animals. Access to this state-of-the-art technology will provide students with a marketable skill that will benefit their future goals whether they are in a health profession or graduate school.

Idaho State University Projects

Growing Your Own: Developing a Virtual Classroom for Clinical Instruction in Rural Idaho

Kathleen Kangas
$65,700

This project provides a critical environmental element to the clinical instruction of SLPs in rural Idaho, specifically development of a Virtual Classroom for use in the Online Master's Degree Speech Language Pathology program. ISU's model allows for students to be directly supervised by SLPs in the field at their geographical sites, and to receive intense clinical instruction from an ISU-based clinical faculty member who meets weekly with each student to discuss cases, view their clinical videos, and provide clinical process instruction. Through the virtual environment, individuals can interact with each other in pairs or groups by means of representations of themselves known as avatars. The Virtual Classroom will enable significantly greater interaction, including presentation of clinical videos, formal presentations by faculty or students, virtual paper-and-pencil consultation, and group discussions, erasing the very real gap between rural and urban settings. This project funds development of a replicable Virtual Classroom, providing a model for expansion of current classroom to other virtual educational settings at ISU. This project will develop (a) a virtual classroom that allows instructors and students to meet for lectures, quizzes, live video streaming sessions, class demonstrations, and discussion groups, (b) virtual grand rounds with students, and (c) a virtual professional office that will include interactive replicas of tools that the SLP professional typically uses in service delivery.

Education Models using Virtual Museum and Collections for K-12 and University Instruction in Idaho History & Culture

Corey Schou
$135,700

This project builds on interdisciplinary research being conducted at Idaho State University to bring museums and their collections to parents, teachers, and students across Idaho through the internet. This project combines recent developments in 3D scanning and database technologies developed at ISU to create opportunities for the implementation of virtual museum collections to better serve underrepresented and geographically separated communities and to increase access to critical Idaho history and culture courses. Pilot interdisciplinary projects to create virtual osteology museum collections (http://vzap.iri.isu.edu), and a project to make artifacts from western Alaska available to stakeholder communities have generated enthusiasm in both the public and scientific communities (http://anthropology.isu.edu/HotSpringsSite/Artifacts.html). PIs propose to use the scanning, imaging, and information management tools within the Informatics Research Institute (IRI) and the Idaho Virtualization Laboratory (IVL), to create a suite of virtual museum educational modules and collections for the presentation of Idaho history, culture, archaeology, and geography.

Technology Enhanced Business Education

Joanne Tokle
$81,000

The College of Business at Idaho State University provides business education for both undergraduate and graduate students, many of whom are non-traditional and need the flexibility of alternative methods of course delivery, including online classes. Community and business leaders in the Wood River Valley expressed their desire for business education in that region. In addition, the Idaho National Laboratory has also stated that many of their employees that work non-typical schedules have few options for business education. The primary objective of this proposal is to deliver educational services to these groups and support economic development and work force training in areas of Idaho that are currently underserved. PI proposes to utilize an array of innovative technologies, including web conferencing, on-demand video recordings, and asynchronous technologies in business "core" courses to make them accessible to a wider range of students. Periodic, face-to-face class meetings, held in the Wood River Valley area, will supplement the online technologies, providing opportunities for more intimate interactions among student and faculty. In addition, the Idaho Education Network (IEN) will be combined with a newly-outfitted classroom in the College of Business to provide synchronous instruction for residents in the Wood River Valley. This project will greatly improve access to business education and, therefore, result in an improved economic development environment in Idaho.

Boise State University Projects

Em-Po WeR-ing Student Success through Video Tutorials

Sara Seely
$24,700

This project builds upon the initiative that was funded last year to create a series of streaming video tutorials that teach information literacy. High-quality instruction for students on how to locate, evaluate, and use information effectively in their first years of higher education is key to ensuring that students can meet their own information needs in an academic setting and transfer those skills to the workplace. To leverage library faculty expertise and reach the greatest number of students at their point of need, Boise State librarians created streaming video tutorials that teach research skills. Because these tutorials must be customized to local resources and curriculum needs, they are unavailable commercially. In Year 1, librarians worked with faculty teaching English Composition 102 to build on current Project Writing and Research (PoWeR), an initiative to incorporate library research instruction into the First Year Writing curriculum. In Year 2, PIs will (1) Train additional library faculty in advanced tutorial creation software and pedagogy; (2) Develop and build or revise at least 10 new tutorials and host them on the BSU Library website; (3) Identify and provide context for tutorials produced at outside organizations, when such tutorials match the technical specifications of local systems and our pedagogical criteria; (4) Host an 8-hour institute during which 15 new English 102 instructors and library faculty redesign English 102 syllabi and assignments to incorporate video tutorials and research instruction; (5) Conduct student pre- and post-tests in English 102 courses and carry out a student portfolio assessment; (6) Conduct a faculty focus group with institute participants; and (7) Revise tutorials based on assessment results and the changing of research resources.

Development of a Biomolecular Immunology Lab Course: Integrating Advanced Technology, Bioinformatics, and 3-D Molecular Visualization

Denise Wingett
$19,800

This project will develop and implement a contemporary immunology laboratory course that incorporates multiple high-technology facilities and advanced scientific instrumentation to enhance the quality of the learning environment at Boise State University. This new molecular immunology laboratory course not only supports student education and professional development in health care and biomedical research, but utilizes several components of advanced technology that are present on the BSU campus but currently under-utilized. This new laboratory course enriches student educational opportunities in biomolecular science by incorporating a state-of-the-art fluorescent-activated cell sorter, an instrument recently acquired with funding (~$500,000) from the National Science Foundation. This technology is integral to many biomedical applications and clinical applications, and promotes student learning about the individual nature and changing properties of cells comprising the immune system. Students will also gain an understanding of how to apply this technology to address fundamental problems in science and biology.

Improving Faculty Effectiveness: Syncing Student Feedback with Digitized Lecture Performance

R. Eric Landrum
$38, 300

This project will combine existing technologies for the purpose understanding the detailed and complex issues surrounding faculty lectures to students, and better understand students' simultaneous assessment of the lecture experience. This project weds two existing technologies in a unique and innovative approach to create a digital video database of best practices of teaching to help other faculty improve instruction and create synchronized evaluative data derived from the videotaped lecture segments on multiple dimensions of critical teacher behaviors. These goals will be achieved by (1) digitally recording multiple lectures by participating faculty; (2) developing a "teaching events" coding scheme to allow classification of teaching events recorded during lectures; (3) using play-analysis software (the same software used to analyze athletic performance) to review, code, and classify faculty lecture behaviors for further analysis; (4) developing an archival database of lecture behaviors for further professional-development opportunities for faculty and to develop a "best practices" guide demonstrating multiple examples of teaching events from diverse disciplines; (5) using the outcomes from faculty lecture segments to collect and document student evaluations of lecture behaviors on multiple dimensions, (using student response systems to provide synchronous feedback to teaching events); (6) based on actual lecture segments and synced student evaluation data, generating further recommendations for best practices of the most effective teacher behaviors as reported by undergraduate students.

Open Source Enterprise Lecture Capture Solution

Brian Bolt
$114,700

This project proposes to implement and study a next-generation deployment of lecture capture that will build upon existing lecture-capture trial of Echo360 and iTunesU, with the aim of taking Boise State to the next level of learning productivity and cost effectiveness. The project is a joint effort by faculty, Academic Technologies, the Office of Information Technology, and a consortium of universities including Indiana, Northwestern, and others to develop documentation, training materials, and best-practice methods. Boise State will partner with the Opencast community in the development of a comprehensive suite of open-source, free, or low-cost technologies related to lecture capture. In contrast to earlier commercial approaches, our approach emphasizes (1) lower costs, by using primarily free software and generic off-the-shelf hardware; (2) high scalability, including the ability to easily add lecture-capture facilities, add multiple rich-media audio/video objects, and add such delivery options as synchronous or asynchronous streamed content or delayed/podcasted content; and (3) increased impact and integration by linking to an existing learning-management system (Blackboard), to iTunesU, and to student-owned technologies such as smart phones, notebooks, and iPods. The project will study the effectiveness of the implemented systems through analysis of usage logs, surveys of student satisfaction, and comparisons with existing lecture capture systems.

Moving the Best Practices of Writing Pedagogy into the Online Classroom

Stephanie Cox
$63,400

This project will develop a model for providing specialized training for online writing teachers, focusing both on effective pedagogy and on designing courses. PIs intend to create and enact a year-long pilot program. By training, mentoring, and equipping online writing instructors, this project will enable the English Department to offer more online writing classes (primarily E101 and E102—required for all students), thereby increasing student access to many other courses with these prerequisites. The information obtained from research and assessment of this project will advance the instruction of online classes well beyond the life of the grant. The data will contribute to national discussions of “best practices”, which will circle back to support innovation and research about online writing instruction at Boise State University, with the final aim of increasing student learning and performance.

THIS PAGE INTENTIONALLY LEFT BLANK

SUBJECT

Approval of Higher Education Research Council (HERC) FY11 Budget

APPLICABLE STATUTE, RULE, OR POLICY

Idaho State Board of Education Governing Policies and Procedures, Section III.W.3., Higher Education Research Council Policy

Senate Bill No. 1207 Appropriations – College and Universities - System-wide Programs

BACKGROUND/DISCUSSION

The State Board of Education was appropriated $1,435,500 for FY 2011 through the colleges and universities appropriation to be used for the mission and goals of the Higher Education Research Council (HERC).

On April 22, 2010, the Board supported a proposal developed by the Vice Presidents for Research to redirect funds that had been allocated to the Research Center funding for Fiscal Year 2011 to create a gap fund entitled ***Idaho Technology Incubation Fund***. The development of this fund would enable Idaho's research universities to play a strong role in the State's economic development through their technology development and transfer programs, which could provide returns to the universities with the licensing of technologies. This fund would also help universities retain talented students by creating new opportunities within the private sector.

The Board office provided HERC with a proposed distribution of funds for FY 2011 to include the incubation fund, which is under a new heading per proposed amended policy entitled Target Research Funding. Amendments to Board Policy III.W., Higher Education Research are provided under a separate agenda item for the Board's consideration. HERC has reviewed the budget and forwards their recommendation to disburse the FY 2011 allocation as outlined on page 3.

IMPACT

The State Board of Education is appropriated funds each year by the Legislature through the colleges and universities appropriation to be used for the mission and goals of the Higher Education Research Council (HERC). The Board allocates these funds for research activities to the four-year public institutions for the following: Infrastructure, Specific Research Funding, Research Center, and State Matching Awards. A line item for Administrative Costs is included to cover the expenses for meetings, office supply needs, and the administration of HERC grant programs and activities.

ATTACHMENTS

STAFF COMMENTS AND RECOMMENDATIONS

The Higher Education Research Council reviewed and recommended approval of the FY 2011 budget allocation at their May 6, 2010 meeting. Staff recommends approval of the budget as presented.

BOARD ACTION

A motion to approve the FY 2011 HERC Budget Allocation as presented.

Moved by_____ Seconded by_____ Carried Yes_____ No_____

FY 2011 Allocation of HERC Funds

Amount to be Awarded $1,435,500	**Proposed Allocation**
Infrastructure Funds	
BSU	$125,000
ISU	$125,000
UI	$200,000
LCSC	$50,000
Total Infrastructure	**$500,000**
Matching Award Grants	
NSF-EPSCoR (UI)	$600,000
Total Matching Grants	**$600,000**
Targeted Research	
Idaho Incubation Fund	$333,000
Total Targeted Research	**$333,000**
Research Centers	
Total Research Center	**$0**
Administrative Costs	
FY11 Administrative Costs	$2,500
Total Administrative Costs	**$2,500**
Total Budget / Allocation	**$1,435,500**
	$1,435,500

THIS PAGE INTENTIONALLY LEFT BLANK

DIVISION OF PROFESSIONAL-TECHNICAL EDUCATION

SUBJECT

Recommendation to update the current definition and references to Tech Prep in SBOE Policy III.Y., Advanced Opportunities.

APPLICABLE STATUTE, RULE, OR POLICY

Idaho State Board of Education Governing Policies & Procedures, Section III.Y., Advanced Opportunities; Idaho Code 33-2211.Powers of State Board for Professional-Technical Education; Idaho Administrative code, IDAPA 55.01.01, The Division of Professional-Technical Education – Rules Governing Administration

BACKGROUND/DISCUSSION

The current definition of and references to Tech Prep in SBOE Policy III.Y Advanced Opportunities need to be updated to reflect the changes that resulted from changes to the federal Carl D. Perkins Career and Technical Education Act of 2006 (Perkins IV). Six regional Advanced Learning Partnerships (ALP) were formed to further efforts of the six Tech Prep consortia funded under the previous Perkins legislation. Program articulation agreements developed by the Tech Prep Consortia used the "2 + 2" framework of two years of high school combined with two years of postsecondary technical education. The ALP uses course-to-course articulation as the tech prep organizational structure to link secondary and postsecondary Professional-Technical programs through articulation agreements. Tech prep articulation agreements align secondary and postsecondary courses in order to provide a seamless, non-duplicative transition from high school to postsecondary PTE programs. Tech prep articulation agreements also provide students with an opportunity to earn college credit toward a technical certificate or an associate's degree.

IMPACT

There is no fiscal impact. Approval will bring Board policy in alignment with the Carl D. Perkins Act of 2006.

ATTACHMENTS

Attachment 1 – Requested Amendments to SBOE Policy III.Y, Advanced Opportunities Page 3

STAFF COMMENTS AND RECOMMENDATIONS

Board staff, the Council of Academic Affairs and Programs (CAAP), and the Instruction, Research and Student Affairs Committee (IRSA) recommends approval of policy amendments to Section III.Y., Advanced Opportunities and the Idaho Standards for Advanced Opportunities Programs as submitted.

BOARD ACTION

A motion to approve the request by the Division of Professional-Technical Education to amend the Idaho State Board of Education Governing Policies & Procedures, Section III.Y., Advanced Opportunities as shown in Attachment 1.

Moved by _____ Seconded by _____ Carried Yes _____ No _____

1. Coverage

   Boise State University, Idaho State University, the University of Idaho, Lewis-Clark State College, Eastern Idaho Technical College, North Idaho College, the College of Southern Idaho, and the College of Western Idaho are covered by these policies. Post-secondary programs intended for transfer come under the purview of the Board.

2. Purpose

   The State Board of Education has made a commitment to improve the educational opportunities to Idaho citizens by creating a seamless system. To this end, the Board has instructed its postsecondary institutions to provide educational programs and training to their respective service regions, support and enhance regional and statewide economic development, and to collaborate with the public elementary and secondary schools. In addition to the Board's desire to prepare secondary graduates for postsecondary programs, the Board is also addressing advanced opportunities programs for qualified secondary students. These programs have the potential for reducing the overall costs of secondary and postsecondary programs to the students and institutions.

   The primary intent of the Board is to develop a policy for advanced opportunities programs for secondary students, which would:

   a. Enhance their postsecondary goals;
   b. Reduce duplication and provide for an easy transition between secondary and postsecondary education; and
   c. Reduce the overall cost of educational services and training.

3. Definitions

   There are various advanced opportunities programs students may access to receive post-secondary credit for education completed while enrolled in the secondary system. Examples include Advanced Placement® (AP), dual credit courses that are taken either in the high school or on the college campus, Tech Prep, and International Baccalaureate programs. For the purpose of this policy the State Board of Education recognizes four different types of advanced opportunities programs depending upon the delivery site and faculty. They are: Advanced Placement®, dual credit, Tech Prep, and the International Baccalaureate program.

   a. Advanced Placement® (AP)

      The Advanced Placement® Program is administered by the College Board. AP students may take one or more college level courses in a variety of subjects. AP courses are not tied to a specific college curriculum, but rather follow national College Board curricula. While taking the AP exam is optional, students may earn college credit by scoring well on the national exams. It is up to the discretion of the individual colleges to accept the scores from the AP exams to award college credit or advanced standing.

b. Dual Credit

Dual credit allows high school students to simultaneously earn credit toward a high school diploma and a postsecondary degree or certificate. Postsecondary institutions work closely with high schools to deliver college courses that are identical to those offered on the college campus. Credits earned in a dual credit class become part of the student's permanent college record. Students may enroll in dual credit programs taught at the high school or on the college campus.

c. Tech Prep

~~Tech Prep is a sequenced program of study that combines at least two years of secondary and two years of postsecondary education. It is designed to help students gain academic knowledge and technical skills, and often earn college credit for their secondary coursework. Programs are intended to lead to an associate's degree or a certificate in a specific career field, and ultimately, to high wage, high skill employment or advanced postsecondary training.~~ Professional-technical education programs are delivered through comprehensive high schools, professional-technical schools, and technical colleges. Tech Prep allows secondary professional-technical students the opportunity to simultaneously earn secondary and postsecondary technical credits. A Tech Prep course must have an approved articulation agreement between the high school and a technical college. Tech Prep is an advanced learning opportunity that provides a head start on a technical certificate or an associate of applied science degree.

d. International Baccalaureate (IB)

Administered by the International Baccalaureate Organization, the IB program provides a comprehensive liberal arts course of study for students in their junior and senior years of high school. IB students take end-of-course exams that may qualify for college-credit. Successful completion of the full course of study leads to an IB diploma.

4. Idaho Programs Standards for Advanced Opportunities Programs

All advanced opportunities programs in the state of Idaho shall be developed and managed in accordance with these standards, which were designed to help school districts, colleges and universities plan, implement, and evaluate high quality advanced opportunities programs offered to high school students before they graduate.

a. Dual Credit Standards for Students Enrolled in Courses Taught at the High School

Curriculum

Curriculum 1 (C1**)**	Courses administered through a dual credit program are catalogued courses and approved through the regular course approval process of the postsecondary institution. These courses have the same departmental designation, number, title, and credits; additionally these courses adhere to the same course description and course content as the postsecondary course

Curriculum 2 (C2)	Postsecondary courses administered through a dual credit program are recorded on students' official academic record of the postsecondary institution.
Curriculum 3 (C3)	Postsecondary courses administered through a dual credit program reflect the pedagogical, theoretical and philosophical orientation of the sponsoring faculty and/or academic department at the postsecondary institution

Faculty

Faculty 1 (F1)	Instructors teaching college or university courses through dual credit meet the academic requirements for faculty and instructors teaching in postsecondary or provisions are made to ensure instructors are capable of providing quality college-level instruction through ongoing support and professional development.
Faculty 2 (F2)	The postsecondary institution provides high school instructors with training and orientation in course curriculum, student assessment criteria, course philosophy, and dual credit administrative requirements before certifying the instructors to teach the college/university's courses.
Faculty 3 (F3)	Instructors teaching dual credit courses are part of a continuing collegial interaction, through professional development, such as seminars, site visits, and ongoing communication with the postsecondary institutions' faculty and dual credit administration. This interaction addresses issues such as course content, course delivery, assessment, evaluation, and professional development in the field of study.
Faculty 4 (F4)	High school faculty is evaluated by using the same classroom performance standards and processes used to evaluate college faculty.

Students

Students 1 (S1)	High school students enrolled in courses administered through a dual credit are officially registered or admitted as degree-seeking, non-degree or non-matriculated students of the sponsoring post-secondary institution.
Students 2 (S2)	High school students are provided with a student guide that outlines their responsibilities as well as guidelines for the transfer of credit.
Students 3 (S3)	Students and their parents receive information about dual credit programs. Information is posted on the high school's website regarding enrollment, costs, contact information at the high school and the postsecondary institution, grading, expectations of student conduct, and other pertinent information to help the parents and students understand the nature of a dual credit course.
Students 4 (S4)	Admission requirements have been established for dual credit courses and criteria have been established to define "student ability to benefit" from a dual credit program such as having junior standing or other criteria that are established by the school district, the institution, and State Board Policy.
Students 5 (S5)	Prior to enrolling in a dual credit course, provisions are set up for awarding high school credit, college credit or dual credit. During enrollment, the student declares what type of credit they are seeking (high school only, college only or both high school and college credit). Students are awarded academic credit if they successfully complete all of the course requirements.

Assessment

Assessment 1 (A1)	Dual credit students are held to the same course content standards and standards of achievement as those expected of students in postsecondary courses.
Assessment 2 (A2)	Every course offered through a dual credit program is annually reviewed by postsecondary faculty from that discipline and dual credit teachers/staff to assure that grading standards meet those in on-campus sections.
Assessment 3 (A3)	Dual credit students are assessed using the same methods (e.g. papers, portfolios, quizzes, labs, etc.) as their on-campus counterparts.

Program Administration and Evaluation

Admin & Evaluation 1 (AE1)	The dual credit program practices are assessed and evaluated based on criteria established by the school, institution and State Board to include at least the following: course evaluations by dual credit students, follow-up of the dual credit graduates who are college or university freshmen, and a review of instructional practices at the high school to ensure program quality.
Admin & Evaluation 2 (AE2)	Every course offered through a dual credit program is annually reviewed by faculty from that discipline and dual credit staff to assure that grading standards meet those in postsecondary sections.
Admin & Evaluation 3 (AE3)	Dual credit students are assessed using the same methods (e.g. papers, portfolios, quizzes, labs, etc.) as their on-campus counterparts.
Admin & Evaluation 4 (AE4)	A data collection system has been established based on criteria established by the high school, institution and State Board to track dual credit students to provide data regarding the impact of dual credit programs in relation to college entrance, retention, matriculation from high school and college, impact on college entrance tests, etc. A study is conducted every 5 years on dual credit graduates who are freshmen and sophomores in a college or university.
Admin & Evaluation 5 (AE 5)	Costs for high school students have been established and this information is provided to students before they enroll in a dual credit course. Students pay a reduced cost per credit that is reviewed annually by the Council on Academic Affairs and Programs (CAAP) at their April meeting to ensure the rate is comparable among institutions within the state and in comparison to adjacent states.
Admin & Evaluation 6 (AE 6)	Agreements have been established between the high school and the postsecondary institution to ensure instructional quality. Teacher qualifications are reviewed, professional development is provided as needed, course content and assessment expectations are reviewed, faculty assessment is discussed, student's costs are established, compensation for the teacher is identified, etc.
Admin & Evaluation 7 (AE 7)	Postsecondary institutions have carefully evaluated how to provide services to all students regardless of where a student is located.

b. Dual Credit Standards for Students Enrolled in Courses at the College/University Campus

A.	The student is admitted by the postsecondary institution as a non-matriculating

	student.
B.	The student is charged the part-time credit hour fee or tuition and additional fees as established by the institution.
C.	Instructional costs are borne by the postsecondary institution.
D.	Four (4) semester college credits are typically equivalent to at least one (1) full year of high school credit in that subject.
E.	In compliance with Idaho Code 33-5104, prior to enrolling, the student and the student's parent/guardian must sign and submit a counseling form, provided by the school district that outlines the provisions of the section of this Code. The counseling form includes written permission from the student's parent/guardian, and principal or counselor.
F.	Any high school student may make application to one of the public postsecondary institutions provided all of the following requirements are met: In compliance with Idaho Code 33-202, the student has reached the minimum age of 16 years or has successfully completed at least one-half of the high school graduation requirements as certified by the high school. Submission of the appropriate institutional application material for admission. Written notification of acceptance to the institution will be provided to the student after he or she submits the appropriate application If required by institutional policy, a student must obtain approval of the college or university instructor to enroll in a course. Those high school students meeting the above requirements will be permitted to enroll on a part-time basis or full-time basis as defined in Board policy.
G.	Students seeking admission who do not meet the above requirements may petition the institution's admission committee for consideration. Students enrolled in a public school may seek admission to enroll by submitting a petition to the high school principal's office and to the admissions office of the postsecondary institution.

c. Advanced Placement Standards

Advanced Placement (AP) courses are taught by high school teachers following the curricular goals administered by The College Board. These college level courses are academically rigorous and conclude with the optional comprehensive AP exam in May. Students taking AP courses accept the challenge of a rigorous academic curriculum, with the expectation of completing the complex assignments associated with the course and challenging the comprehensive AP exam. The AP Examination is a national assessment, based on the AP curriculum, given in each subject area on a specified day at a specified time, as outlined by the College Board. Students and parents are responsible for researching the AP policy of the postsecondary institution the student may wish to attend. College/university credit is based on the successful completion of the AP exam, and dependent upon institutional AP credit acceptance policy.

Curriculum

Curriculum 1 (C1**)**	Postsecondary institutions evaluate AP scores and award credit reflecting the pedagogical, theoretical, and philosophical orientation of the sponsoring faculty and/or academic department at the institution.
Curriculum 2 (C2)	High school credit is given for enrollment and successful completion of an AP class.

Faculty

Faculty 1 (F1)	AP teachers shall follow the curricular materials and goals outlined by The College Board.
Faculty 2 (F2)	The AP teacher may attend an AP Institute before teaching the course.

Students/Parents

Students 1 (S1)	A fee schedule has been established for the AP exam. Students and their parents pay the fee unless other arrangements have been made by the high school.
Students 2 (S2)	Information must be available from the high school counselor, AP coordinator or other faculty members regarding admission, course content, costs, high school credit offered and student responsibility.

Assessment

Assessment 1 (A1)	Students are assessed for high school credit according to the requirements determined by the high school.

Program Administration and Evaluation

Admin & Evaluation 1 (AE1)	To evaluate the success of the programs and to improve services, the school district must annually review the data provided by The College Board.
Admin & Evaluation 2 (AE2)	The school district must carefully evaluate how to provide services to all students, regardless of family income, ethnicity, disability, or location of educational setting.

d. Tech Prep Standards

Professional-Technical Education programs in Idaho ~~is~~ are delivered through comprehensive high schools, professional-technical schools, and the technical college system. ~~An approved articulation agreement allows the student to earn postsecondary credit while in a secondary school that leads to a specific postsecondary two-year certificate, degree, or apprenticeship.~~ Tech Prep allows secondary professional-technical students the opportunity to simultaneously earn secondary and postsecondary technical credits. A Tech Prep course must have an approved articulation agreement between the high school and a postsecondary institution. Tech Prep is an advanced learning opportunity that provides a head start on a technical certificate, an associate of applied science degree, or towards a baccalaureate degree.

Curriculum

Curriculum 1 (C1**)**	A Tech Prep course must have an approved articulation agreement with a postsecondary institution. ~~Articulated agreements must include a curriculum outline that lists at least two years of secondary and two or more years of postsecondary professional-technical courses in an unduplicated sequence with a common core of required proficiency.~~
~~Curriculum 2~~	~~The curriculum must identify student competencies in math, science, and~~

~~(C2)~~	~~communication including applied academics and work-site learning experiences in a coherent sequence of courses.~~
Curriculum ~~3~~2 (C~~3~~2)	Secondary and postsecondary educators must agree on the ~~common core of required proficiency~~ technical competencies and agree to ~~meet that~~ the level of proficiency ~~in the program~~.
~~Curriculum 4 (C4)~~	~~Tech Prep program proposals must provide equal access to members of special populations.~~

Faculty

Faculty 1 (F1)	Secondary and postsecondary educators must hold appropriate certification in the program area for which articulated credit is to be awarded.

Students/Parents

Students 1 (S1)	~~To receive articulated credit, students must apply for and must be accepted into the program.~~Tech Prep students are high school students.
Students 2 (S2)	~~Information must be available from the high school counselor, Tech Prep Coordinator or other faculty members regarding admission, course content, costs, credit offered and student responsibility.~~ At the completion of the Tech Prep course the instructor will recommend students eligible for college credit based on their performance. To be eligible for college credit students must receive a grade of B or complete a minimum of 80% of the competencies in the course.
~~Students 3 (S3)~~	~~The students are assessed for high school and postsecondary credit according to the requirements of the articulation agreement determined by the high school and the articulated institution.~~

Assessment

Assessment 1 (A1)	~~Approved end-of-course assessments must be administered to senior students enrolled in a Professional-Technical School who have completed the required sequence of instruction.~~ The students are assessed for high school and postsecondary credit according to the requirements of the articulation agreement.

Program Administration and Evaluation

Admin & Evaluation 1 (AE1)	The technical college in each region administers the Advanced Learning Partnership (ALP). The ~~S~~school districts in each region are members of the ALP. The Tech Prep program is administered through the six Advanced Learning Partnerships ~~consortia~~ and each of the technical colleges serves as the fiscal agent. The ALP Advisory Committee meets at least twice per school year.
Admin & Evaluation 2 (AE2)	Each ~~Tech Prep~~ articulate~~d~~ion agreement must be reviewed annually.

SUBJECT

Second Reading, Proposed Amendments to Board Policy III.W. Higher Education Research

REFERENCE

April 22, 2010 — First Reading, Board Policy III.W., Higher Education Research approved.

APPLICABLE STATUTE, RULE, OR POLICY

Idaho State Board of Education Governing Policies and Procedures, Section III.W., Higher Education Research Council Policy

BACKGROUND/DISCUSSION

HERC's current structure consists of the Presidents from each of the state's four-year public institutions, four non-institutional representatives selected from the general public, a representative from the Governor's Innovation Council, and the Board's Chief Academic officer who serves as an ex-officio, non-voting member. Proposed revisions to Board Policy III.W., Higher Education Research include the following representation on HERC:

- the Vice Presidents of Research from Boise State University, Idaho State University, and the University of Idaho and a representative of Lewis-Clark State College;
- a representative of the Idaho National Laboratory (INL);
- four non-institutional representatives, with consideration of geographic, private industry involvement and other representation characteristics; and
- two ex-officio members consisting of the Chief Academic officer of the Board and a representative of the Idaho Department of Commerce.

Other modifications include revisions to clarify HERC's role and responsibilities.

IMPACT

There have been no additional changes between the first and second readings. Approval of the amendments to Board policy will provide HERC with the guidance and structure needed to effectively address policy and programs consistent with the current climate of academic research in the state of Idaho.

ATTACHMENTS

STAFF COMMENTS AND RECOMMENDATIONS

Instruction, Research, and Student Affairs Committee (IRSA), the Higher Education Research Council (HERC), and Board staff recommend approval of the proposed amendments to Board Policy III.W. as presented.

BOARD ACTION

A motion to approve the second reading of proposed amendments to Board Policy III.W. Higher Education Research to include the restructure of HERC as submitted.

Moved by_____ Seconded by_____ Carried Yes_____ No_____

W. Higher Education Research

1. Higher Education Research Council

   a. Purpose and Coverage

   Idaho's universities seek to be a driving force in innovation, economic development and enhanced quality of life in the State of Idaho through nationally and internationally lauded research programs in strategic areas. By developing and leveraging the State's unique research expertise and strengths, Idaho's universities will serve as catalyst and engine to spur the creation of new knowledge, technologies, products and industries. This in turn will lead to new advances and opportunities for economic growth and enhance the State's reputation as a national and international leader in excellence and innovation.

   The Higher Education Research Council of the Idaho State Board of Education (HERC) provides guidance to Boise State University, Idaho State University, Lewis-Clark State College and the University of Idaho for a statewide collaborative effort to accomplish these goals and objectives. In addition, HERC provides direction for and oversees the use of the limited resources of the State of Idaho provided by the Legislature for research by promoting research activities that will have the greatest beneficial effect on the quality of education and the economy of the State. The implementation of the higher education research policy of the Board will be the duty and responsibility of HERC.

   b. The Role of Research in Higher Education

   Research is the creative search for and application of new knowledge.

      i. Philosophical Statements and Guiding Principles

      The significant role science, technology and other research play in statewide economic development is also accompanied by a demand for the scrutiny of publicly funded research, accountability, and attention to the management of ethical, legal, and safety issues associated with academic research. To fulfill this role, HERC will direct and oversee the development, implementation, and monitoring of a statewide strategic plan for research. The development of a statewide strategic plan for research that will assist in the identification of general research areas that will enhance the economy of Idaho via partnering between academia, industry, and/or government. HERC will facilitate this partnering and interaction among business, industry and the public sector with science, engineering and other research faculty.

      This Policy is designed to assist the public baccalaureate and post-baccalaureate institutions in addressing these areas via appropriate research activities through:

         (1) individual and multi-disciplinary research projects;

(2) extensive and rapid dissemination of the new knowledge and establishment of knowledge networks which would facilitate public, private, and academic institution interaction; and

(3) collaborative relationships between academia and varied shareholders outside the academy.

The guiding principles are:

(1) to maximize impact on the quality of education and economic development as a consequence of Idaho's investment in quality science, engineering, and other research.
(2) to ensure accountability for the state's investment via demonstrable results.

ii. Support of research activities with public funds is important because:

(1) Research is important in the education of students at all levels.

(2) Research plays an important role in maintaining and enhancing faculty quality.

(3) Academic research contributes to economic development.

iii. The Board desires to increase the quality and quantity of research and to encourage continued public and private support of research in Idaho through application of the following principles:

(1) The quality and quantity of academic research produced is extremely dependent upon the research infrastructure.
(2) Faculty at Idaho's baccalaureate and post-baccalaureate institutions will be eligible to compete for research funds.

iv. The development and implementation of a statewide strategic plan for research is a vehicle for identification of research objectives and areas.

c. Specific Funding Programs to Strengthen Research in Idaho

The Board recognizes that talent exists on all of the campuses and the importance of permitting competition for research support and initiation funds. Therefore, the Board will use the following criteria in allocating funds for research activities under this policy at the various institutions.

Additionally, any condition set forth in the legislative appropriation for these research programs must be demonstrably met by the programs and/or projects that are to receive the appropriation.

i. Infrastructure

A portion of the competitive research funding should be distributed to the state's baccalaureate and post-baccalaureate institutions to support their science, engineering, and other research infrastructure. Distribution of these funds will be made according to guidelines approved by HERC. These funds should be reserved for library support essential to research, graduate research assistantships, post doctoral fellows, technician support, maintenance contracts, research equipment, competitively awarded summer research support, startup funds for new hires, and incentives to reward faculty for their research achievements.

ii. Targeted Research Funding

Faculty members at the state's baccalaureate and post-baccalaureate institutions will have an opportunity to submit research project proposals for review under this program.

(1) All projects selected for funding under this program will demonstrate the potential for economic benefit or cost savings for the State.

(2) A major focus under this program should be start-up and seed funds that will assist a principal investigator in promoting basic or applied research; competing for external funding; and enhancing technology transfer or commercialization.

(3) Collaborative research projects are encouraged.

Guidelines for this program will be established by HERC, will incorporate an independent peer review, and will include an evaluation component for commercial applicability for the benefit of the State.

iii. Research Centers

Many important research advances are made through focused research centers. These centers should involve several faculty members from multiple institutions in conjunction with the necessary research equipment and support personnel. The funds needed to establish centers of this type should be adequate to create a critical research mass for multiple years leading to research center sustainability. State funding should be supplemented by non-state matching funds.

iv. State Matching Awards

Under this program State funds would be available to match those awarded by non-state sources by using an external peer review process.

Examples of matching entities for the state matching funds would be:

(1) Federal Agencies
(2) EPSCoR projects e.g., National Science Foundation, National Institute of Health, Department of Energy, Department of Defense, National Aeronautics and Space Administration, etc.
(3) Foundations
(4) Business and Industry
(5) Other

v. Post-Award Accountability

Any project receiving funding through any of the previously described Board sponsored programs will be required to report on its productivity with respect to such items as:

(1) number of students involved;
(2) number of faculty involved;
(3) external funding earned as a result;
(4) publications in refereed journals;
(5) presentations at professional meetings and conferences;
(6) patents awarded or pending;
(7) economic benefits; or
(8) problem resolution.

Reporting procedures will be established and administered through HERC.

d. Responsibilities and Membership of the Higher Education Research Council

In order to advise the Idaho State Board of Education on the implementation of the above strategies, HERC will report to the Board through the Instruction, Research and Student Affairs Committee. The assigned responsibilities of HERC will include the following:

(1) direct and oversee the development of a higher education statewide strategic plan for research;

(2) direct and oversee the use of Legislatively appropriated funds for higher education research;

(3) determine and distribute to all interested parties the guidelines for submission of proposals under the competitive programs;

(4) organize the review procedures for proposals submitted under the guidelines mandated and recommend to the Board which of these proposals should be funded;

(5) monitor the productivity of each funded project to warrant continued funding and to provide accountability.

The membership of HERC shall consist of:

(1) the Vice Presidents of Research from Boise State University, Idaho State University, and the University of Idaho and a representative of Lewis-Clark State College;

(2) a representative of the Idaho National Laboratory (INL);

(3) four non-institutional representatives, with consideration of geographic, private industry involvement and other representation characteristics; and

(4) two ex-officio members consisting of the Chief Academic officer of the Board and a representative of the Idaho Department of Commerce.

The Board shall appoint the four non-institutional representatives. The four non-institutional representatives shall be appointed for terms that are initially staggered to provide a rolling renewal of appointments. Thereafter, appointments shall be for three years. The appointments of the representatives of INL and the Department of Commerce shall be subject to approval of the Board. All members of HERC shall have equal voting privileges.

2. Experimental Program to Stimulate Competitive Research (EPSCoR)

a. Overview

The Experimental Program to Stimulate Competitive Research (EPSCoR) represents a federal-state partnership to enhance the science and engineering research, education, and technology capabilities of states that traditionally have received smaller amounts of federal research and development funds. As a participating state, Idaho EPSCoR shall be subject to federal program requirements and policy established by the Idaho State Board of Education (Board). The purpose of EPSCoR is to build a high-quality, academic research base to advance science, technology, engineering and mathematics (STEM) to stimulate sustainable improvements in research and development capacity and competitiveness.

b. EPSCoR Mission

Idaho EPSCoR's mission shall be to stimulate systematic and sustainable improvements in Idaho's academic science, technology, engineering and mathematics (STEM) research capabilities for the purpose of establishing nationally prominent research competitiveness in selected areas eligible for support by the National Science Foundation and other federal and private sponsors. It is expected that EPSCoR investments shall harmonize with the research interests of Idaho's public universities, the State of Idaho, and Idaho's industries. The University of Idaho, Idaho State University, and Boise State University are Idaho EPSCoR partner institutions.

c. Idaho EPSCoR Committee

Idaho EPSCoR shall be guided by a committee appointed by the Board.

i. Duties and Responsibilities

The Idaho EPSCoR Committee shall serve under the direction of the Board and shall oversee the implementation of the Idaho EPSCoR program and office. The Idaho EPSCoR Committee is responsible for the selection and progress of EPSCoR projects funded by various federal agencies, in accordance with agency-specific guidelines. The committee shall establish policies and procedures to ensure that EPSCoR program goals and objectives are met. These policies and procedures shall be brought to the Board for approval. The committee will carry out the following EPSCoR objectives:

(1) To catalyze key research themes and related activities within and among EPSCoR jurisdictions that empower knowledge generation, dissemination and application;
(2) To activate effective jurisdictional and regional collaborations among academic, government and private sector stakeholders that advance scientific research, promote innovation and provide multiple societal benefits;
(3) To broaden participation in science and engineering by institutions, organizations and people within and among EPSCoR jurisdictions; and
(4) To use EPSCoR for development, implementation and evaluation of future programmatic experiments that motivate positive change and progression.

ii. Operating Procedures

The committee will meet in person annually, and more often by teleconference to fulfill its duties. Additional meetings may be called by the chair or by request of three (3) or more committee members. The chair will appoint subcommittees as needed. The appointments are subject to review of the entire committee. On a regular basis, the committee shall monitor the activities of the project director and provide direction as necessary.

The project director, under the direction of the chair, prepares the agenda, schedules each meeting of the committee and maintains a written record of the committee's activities.

iii. Membership

Committee membership shall be constituted to provide for geographic, academic, business and state governmental representation. The committee shall consist of sixteen (16) members with voting privileges, composed of the following:

- The Vice President for Research or Chief Research Officer at the University of Idaho, Idaho State University, and Boise State University;
- One member from each chamber of the Idaho state legislature;
- One representative from Idaho National Laboratory;
- One representative from the Idaho Department of Commerce – such individual shall be focused on economic development;
- The remainder shall be representatives of the private sector who have a stake in developing the state's research infrastructure or who have experience in innovation and entrepreneurial activities, applied research and development, management and finance, or community economic development.

In addition, one representative of the Governor's office and one member of the Board shall serve on the committee as ex officio members without voting rights.

iv. Nominating Process

The Idaho EPSCoR Committee will nominate candidates for committee membership for consideration by the Board. The list of candidates must be forwarded to the Board for consideration not less than 60 days prior to expiration of the term of committee member, or within 30 days after any vacancy.

(1) Incumbent Reappointment

In the event that the incumbent candidate is interested in reappointment and is eligible to continue serving, the nominating committee shall forward a recommendation to the Board, along with a letter of interest and statement of qualifications for the incumbent. The Board may choose to reappoint the incumbent without soliciting other candidates, thus completing the appointment procedures. If there is no incumbent seeking reappointment, or if the Board chooses not to reappoint an incumbent, the procedures are as outlined in item (2).

(2) Open Appointment

(a) The EPSCoR committee on behalf of the Board will advertise the vacancy in appropriate state, regional or local publications. Such advertisements will solicit interested persons to apply for the vacant position on the Idaho EPSCoR Committee.

(b) Each applicant must provide a written statement expressing his or her interest in becoming a member of the committee. Each applicant must also provide evidence of his or her qualifications, and must identify his or her primary residence.

(c) The EPSCoR committee will review all applications for the vacant position and conduct interviews as deemed necessary. The purpose of this review is to identify the most qualified candidates for Board consideration.

(d) The EPSCoR committee will forward the qualified candidates, in order of preference, to the Board for consideration. The Board may provide for interviews of the candidates, if needed.

The Board may, after review of the candidates nominated by the committee pursuant to the process described herein, consider other candidates for committee membership identified by the Board or its staff.

v. Terms of Membership

Committee members shall serve five-year terms. An incumbent member may be nominated by the committee for re-appointment by the Board, but no member may serve more than three (3) consecutive terms. All terms, regardless of length, shall begin on July 1st and end on June 30th of the year(s) beginning or ending said term.

Appointments will be staggered to ensure that no more than one-third (1/3) of the appointments will become vacant in any given year. An appointee who has reached the end of his or her term shall remain in service as a committee member until reappointment, or until the appointment of a new member is named and approved by the Board. Officers will be nominated and elected by a vote of the committee.

d. Reporting

The committee shall prepare an annual report to the Board that details all projects by federal agency source, including reports of project progress from associated external Project Advisory Board (PAB) .

e. Idaho EPSCoR Office

Within guidelines specified by NSF and this policy, the EPSCoR committee shall determine and select an Idaho EPSCoR partner institution to serve as the lead institution which will house the project director for purposes of administering Idaho EPSCoR and providing support and resources to the Idaho EPSCoR Committee.

f. Idaho EPSCoR Project Leadership

The project director and any associate project directors are selected by and serve under the direction of the Idaho EPSCoR Committee.

The project director shall be a tenured faculty member of an Idaho EPSCoR partner institution whose qualifications must include: a successful research track record (grants and professional publications) in science or engineering, experience in research management and academic administration, and a successful record of dealing with various segments of academic institutions, government, industry, and the public.

THIS PAGE INTENTIONALLY LEFT BLANK

SUBJECT

Second Reading, Proposed addition to Board Policy III.P., Students

REFERENCE

April 22, 2010 First Reading, Board Policy III.P., Students was approved.

BACKGROUND/DISCUSSION

This is a new policy section written to guide the consistent handling of student complaints once they have been forwarded to the Office of the State Board of Education. This policy provides guidance for a written process and the time frame for students to appeal to the Office of the State Board in instances where a student may feel they have not had the opportunity for an appropriate review at the campus level.

IMPACT

There have been no additional changes between the first and second readings. Student grievances are to be handled at the institutional level. This policy sets forth a process for those instances when a complaint is sent to the Office of the State Board of Education after exhausting remedies at the institutional level.

ATTACHMENTS

Attachment 1 – Board Policy III.P.18, Students Page 3

STAFF COMMENTS AND RECOMMENDATIONS

Board staff recommends the approval of this policy

BOARD ACTION

A motion to approve the second reading of the proposed addition to Board Policy III.P., Students as submitted.

Moved by _____ Seconded by _____ Carried Yes _____ No _____

THIS PAGE INTENTIONALLY LEFT BLANK

18. Student Complaints/Grievances.

The State Board of Education and Board of Regents of the University of Idaho, as the governing body of the state's postsecondary educational institutions, has established the following procedure for review of institution decisions regarding student complaints/grievances:

a) The Board designates its Executive Director as the Board's representative for reviewing student complaints/grievances, and authorizes the Executive Director, after such review, to issue the decision of the Board based on such review. The Executive Director may, in his/her discretion, refer any matter to the Board for final action/decision.

b) A current or former student at a postsecondary educational institution under the governance of the Board may request that the Executive Director review any final institutional decision relating to a complaint or grievance instituted by such student related to such individual's attendance at the institution. The student must have exhausted the complaint/grievance resolution procedures that have been established at the institution level. The Executive Director will not review complaints/grievances that have not been reported to the institution, or processed in accordance with the institution's complaint/grievance resolution procedures.

c) A request for review must be submitted in writing to the Board office to the attention of the Chief Academic Officer, and must contain a clear and concise statement of the reason(s) for Board review. Such request must be received in the Board office no later than thirty (30) calendar days after the student receives the institution's final decision on such matter. The student has the burden of establishing that the final decision made by the institution on the grievance/complaint was made in error. A request for review must include a copy of the original grievance and all proposed resolutions and recommended decisions issued by the institution, as well as all other documentation necessary to demonstrate that the student has strictly followed the complaint/grievance resolution procedures of the institution. The institution may be asked to provide information to the Board office related to the student complaint/grievance.

d) The Chief Academic Officer will review the materials submitted by all parties and make a determination of recommended action, which will be forwarded to the Executive Director for a full determination. A review of a student complaint/grievance will occur as expeditiously as possible.

e) The Board office may request that the student and/or institution provide additional information in connection with such review. In such event, the student and/or institution must provide such additional information promptly.

f) The Board's Executive Director will issue a written decision as to whether the institution's decision with regard to the student's complaint/grievance was proper or was made in error. The Executive Director may uphold the institution's decision, overturn the institution's

decision, or the Executive Director may remand the matter back to the institution with instructions for additional review. Unless referred by the Executive Director to the Board for final action/decision, the decision of the Executive Director is final.

The Board staff members do not act as negotiators, mediators, or advocates concerning student complaints/grievances.

SUBJECT

Second Reading, New Proposed Board Policy III.A.B., Idaho Rural Physician Incentive Program Oversight Committee

REFERENCE

April 22, 2010 First Reading, Board Policy III.A.B., Idaho Rural Physician Incentive Program Oversight Committee was approved.

APPLICABLE STATUTE, RULE, OR POLICY

Sections, 33-3723 – 33-3725, Idaho Code.

BACKGROUND/DISCUSSION

The Idaho Rural Physician Incentive Program was approved by the 2003 Idaho Legislature to encourage primary care physicians to practice in medically underserved areas of Idaho. Sections 33-3723–33-3725, Idaho Code establishes the authority of the Board, through an oversight committee, to administer the program and assess/collect the rural physician incentive fee.

While the Oversight Committee has been established per Section 33-3724, Idaho Code, a Board policy is necessary to provide guidance to the Oversight Committee. Board staff worked with the Oversight Committee to develop a new policy, which would cover the role and purpose of the committee, operating procedures, committee structure, terms of membership, and reporting requirements.

IMPACT

There have been no additional changes between the first and second readings. Approval of the Board policy will provide specific guidance to the Oversight Committee needed for its operation and implementation of the rural physician program.

ATTACHMENTS

Attachment 1 – New Proposed Board Policy III.A.B. Page 3

STAFF COMMENTS AND RECOMMENDATIONS

Board staff and the Instruction, Research and Student Affairs Committee (IRSA) recommends approval of the new proposed Board Policy as presented.

BOARD ACTION

A motion to approve the Second Reading of new proposed Board Policy III.A.B., Idaho Rural Physician Incentive Program Oversight Committee as presented.

Moved by_____ Seconded by_____ Carried Yes_____ No_____

THIS PAGE INTENTIONALLY LEFT BLANK

A.B. Idaho Rural Physician Incentive Program

1. Overview

   The Idaho Rural Physician Incentive Program was developed to encourage primary care physicians to practice in medically underserved areas of Idaho. Sections 33-3723, 33-3724, and 33-3725, Idaho Code establishes the authority for the State Board of Education (Board), through an oversight committee, to administer the Idaho Rural Physician Incentive Program, and to assess and collect the rural physician incentive fee.

   Idaho Code Section 33-3724 authorizes the Rural Physician Incentive Fund and facilitates payment of qualified educational debts of rural physicians who practice in areas of the state that are medically underserved and that demonstrate the need for assistance in physician recruitment. The fund is funded by fees assessed to all Idaho students participating in the WWAMI (Wyoming, Washington, Alaska, Montana and Idaho) and University of Utah state supported medical education programs.

2. Idaho Rural Physician Incentive Program Oversight Committee

   The Idaho Rural Physician Incentive Program Oversight Committee (Oversight Committee) is established per Idaho Code 33-2724 and shall serve under the direction of the Board.

   a. Oversight Committee Membership

      Committee membership shall have a balanced representation of primary constituent groups within health professions. The committee shall be composed of members from the following organizations:

      1. Idaho Hospital Association
      2. Idaho Medical Association
      3. Idaho Osteopathic Association
      4. Office of Rural Health and Primary Care
      5. The Idaho Area Health Education Center
      6. Medical Student Program Administrator
      7. Each Idaho Physician Residency Program receiving State appropriated fund support
      8. Other appropriate organizations

   b. Nominating Process

      The Executive Director shall solicit written nominations of qualified individuals from each of the organizations provided above for committee membership. The Executive Director may select from the nominations or select other qualified individuals to serve on

the committee. All selections by the Executive Director are subject to approval by the Board. The list of candidates must be forwarded to the Board for consideration not less than 60 days prior to expiration of the term of committee member, or within 30 days after any vacancy.

c. Terms of Membership

Committee members shall serve three-year terms. An incumbent member may be nominated by the committee for re-appointment by the Board, but no member may serve more than three (3) consecutive terms. All terms shall begin on July 1 and end on June 30 of the year(s) beginning or ending said term.

Appointments will be staggered to ensure continuity of operations as members of the Committee complete their initial term of appointment and are reappointed or replaced. An appointee who has reached the end of his or her term shall remain in service as a committee member until reappointment, or until the appointment of a new member is named and approved by the Board. Officers will be nominated and elected by a vote of the committee.

d. Elections of Officers

The Committee will elect a Chair, Vice-chair, and Secretary for terms of office of one year. The Chair will call and conduct each meeting of the Committee. In the absence of the Chair, the Vice-chair may call and conduct each meeting. The Chair or Vice-chair will provide a brief oral report after each meeting to the Executive Director. The Committee Secretary will ensure that a brief written summary of each Committee meeting, along with Committee approved actions/recommendations, is forwarded to the Executive Director in a timely manner.

e. Operating Procedures

The Committee will meet at the call of the Chair as often as necessary to fulfill Committee responsibilities but not less than twice each calendar year. Time and location of all meetings is at the discretion of Chair based on availability of Committee members. A meeting agenda will be published prior to each meeting and made available to Committee members along with appropriate meeting materials. All meetings will conform to Section, 67-2340-67-2347, Idaho Code, Open Meeting Law.

f. Duties of the Oversight Committee

The Committee will solicit qualified physician applicants/eligible areas for participation in the Rural Physician Incentive Program; and select and prioritize approved physician candidates/eligible areas consistent with the Board approved criteria (see IDAPA 08.01.14, sections .014 and .016). Awards shall not exceed the amount available in the fund when making award recommendations.

SUBJECT

Course Transfer and Articulation Report

APPLICABLE STATUE, RULE, OR POLICY

Idaho State Board of Education Governing Policies and Procedures, Section III.O., Curriculum Equivalency Schedules and Idaho State Board of Education Governing Policies and Procedures, Section III.V., Statewide Articulation and Associate Degree

BACKGROUND/DISCUSSION

The process of course transfer is becoming more important because students are increasingly mobile. "Swirling" is a new term that has been coined to reflect students enrolled simultaneously in more than one institution, and transferring among institutions. These trends are made possible by distance learning and electronic course delivery. Course transfer and articulation have also become electronically accessible though professionally designed websites and free host locations like "collegetransfer.net."

Transfer articulation is being addressed in many ways at the institutional level. Board approved core courses transfer across all institutions. Colleges and Universities have articulations that enable students to move seamlessly from one institution to another, particularly when moving to the next higher degree. Colleges and universities also have 2+2 agreements which expedite completion and graduation.

Several states are using electronic course transfer websites including Illinois, South Carolina, Pennsylvania and Arkansas. Idaho colleges and universities are considering a pilot project to upload core courses to "collegetransfer.net." This is a free service already hosting several thousand courses from hundreds of institutions around the world.

Board policy regarding transfer is being revised and updated, and will be presented for the first reading at the August Board meeting. This report has been prepared in response to legislative and Board inquiries. It offers an overview of how Idaho courses transfer among institutions, and provides recommendations for streamlining transfer and articulation through electronic portals which offer transparent and accountable user friendly applications.

IMPACT

If the Board wished to pursue developing an electronic portal, with a national course transfer company, there would be a cost. Start-up would be approximately $145,000 divided by 8 institutions at a cost of about $18,000 per institution.

ATTACHMENTS

STAFF COMMENTS AND RECOMMENDATIONS

Board staff recommends that Board policy on transfer is updated and vetted by institutions, that expanded inter institutional articulations are developed, that institutions work toward common course numbering and explore professionally developed online portals for course transfer.

BOARD ACTION

This item is for informational purposes only. Any action will be at the Board's discretion.

Course Transferability

paving the way to degree completion

NATIONALLY
STUDENTS ARE MOBILE
CREDITS SHOULD BE PORTABLE

What course transfer is NOT

automatic acceptance of all credits from any institution

students don't always understand differences in programs

What course transfer means

applying credits from a Board recognized accredited school, to another institution

students don't always understand prerequisites, implications of career changes or accreditation requirements

National facts on transferability

60 % OF ALL STUDENTS WILL TRANSFER AT LEAST ONCE

"SWIRLING" AMONG INSTITUTIONS IS BECOMING COMMON

MANY UNIVERSITIES PROVIDE TRANSFER ARTICULATION PORTALS

Idaho has achieved

Core course transferability

Admissions agreements among institutions

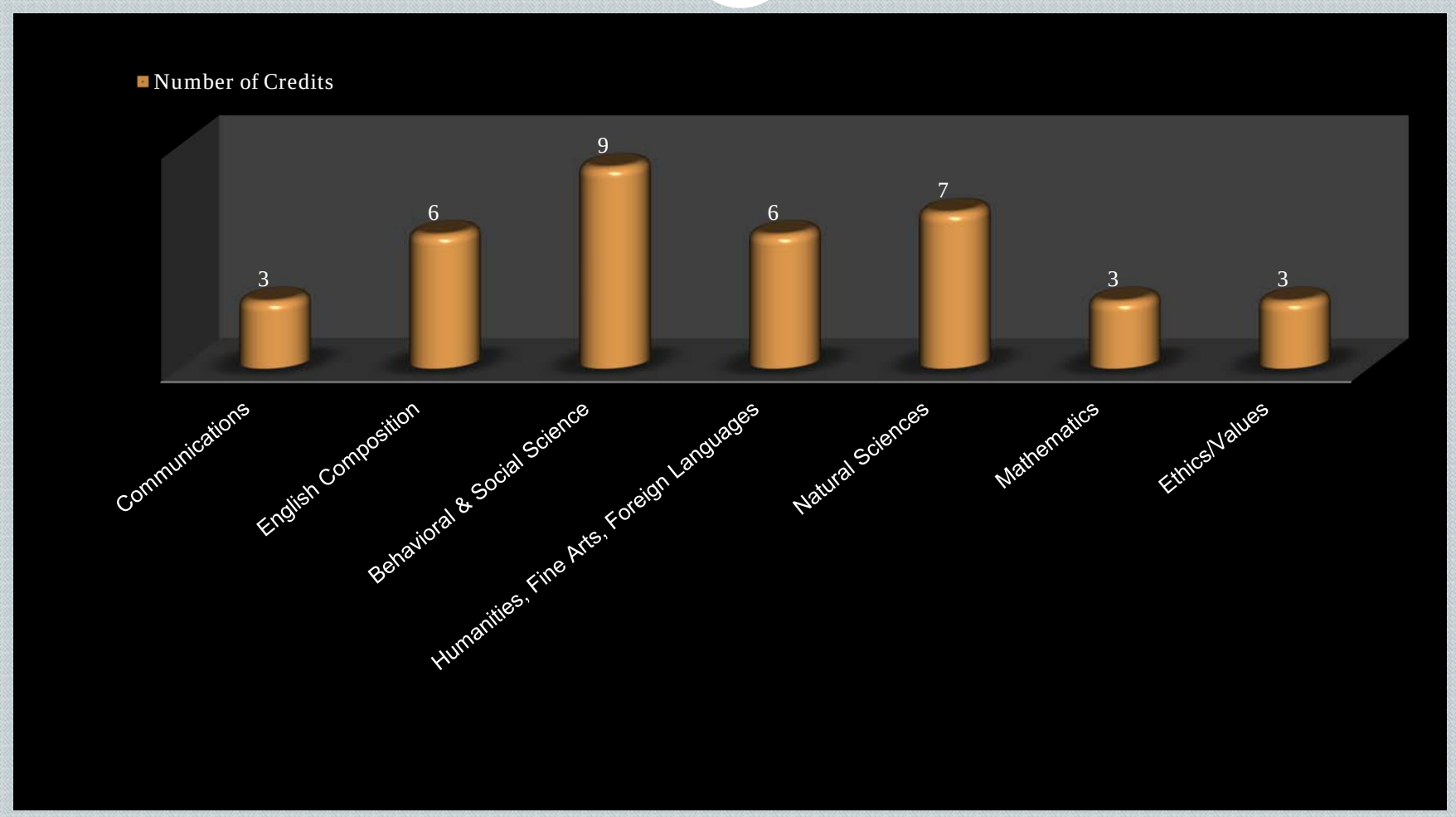
Is expanding 2+2 articulations

Many international articulation agreements

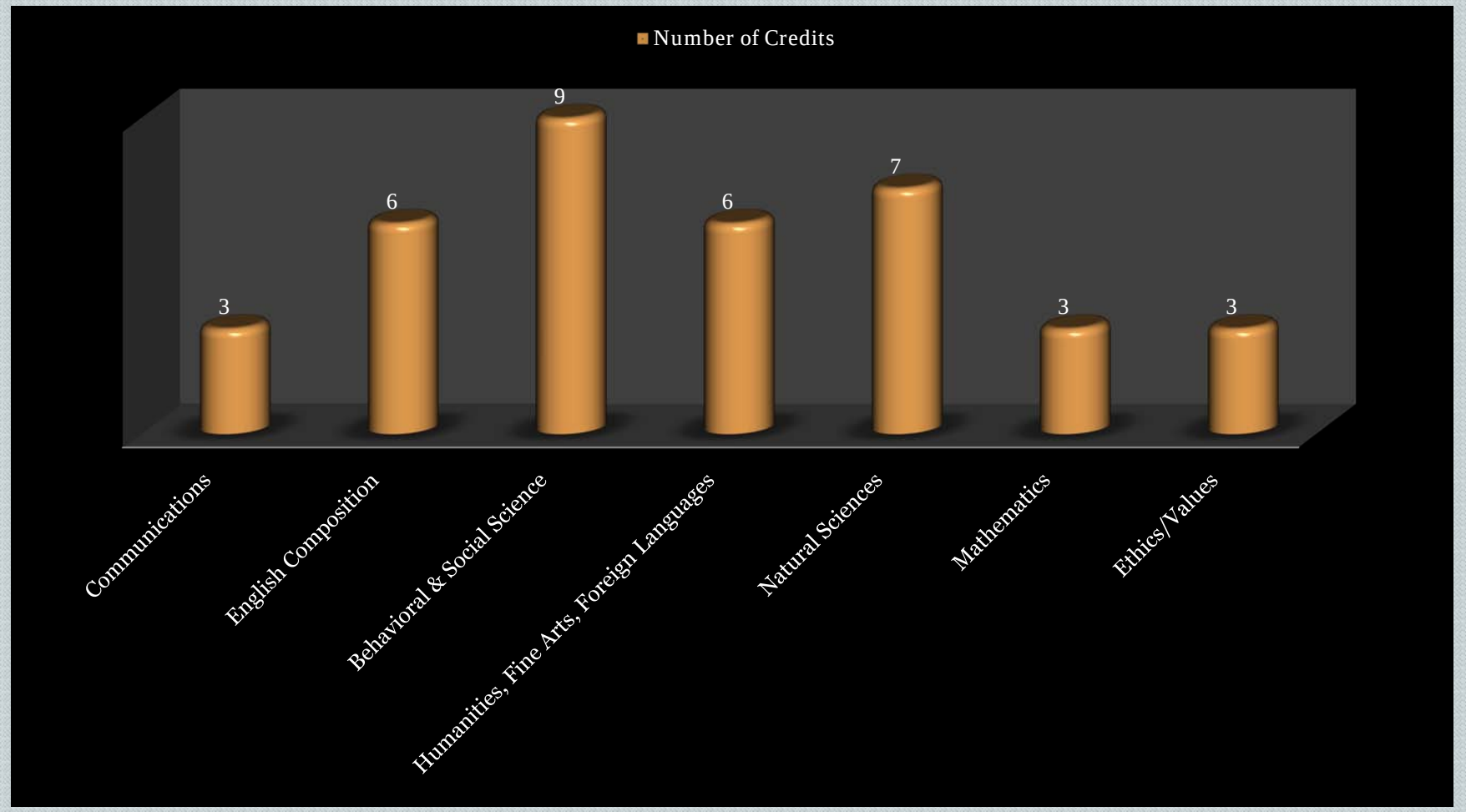
Idaho has 8 diverse public postsecondary institutions

- All institutions meet Idaho code
- Institutions have diverse requirements and need flexibility
- All institutions must meet national and specialized accreditation standards

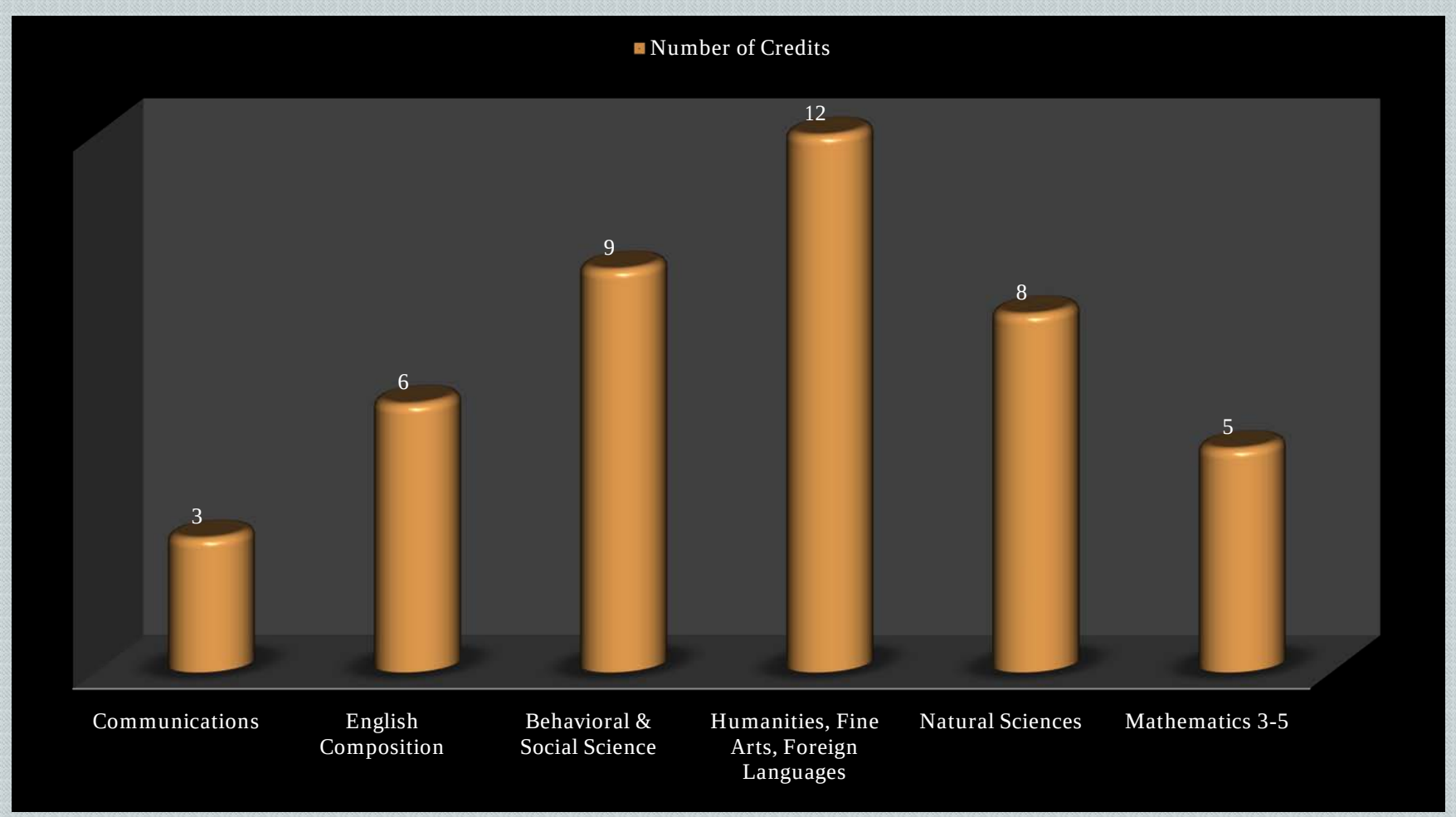
Board General Education Core



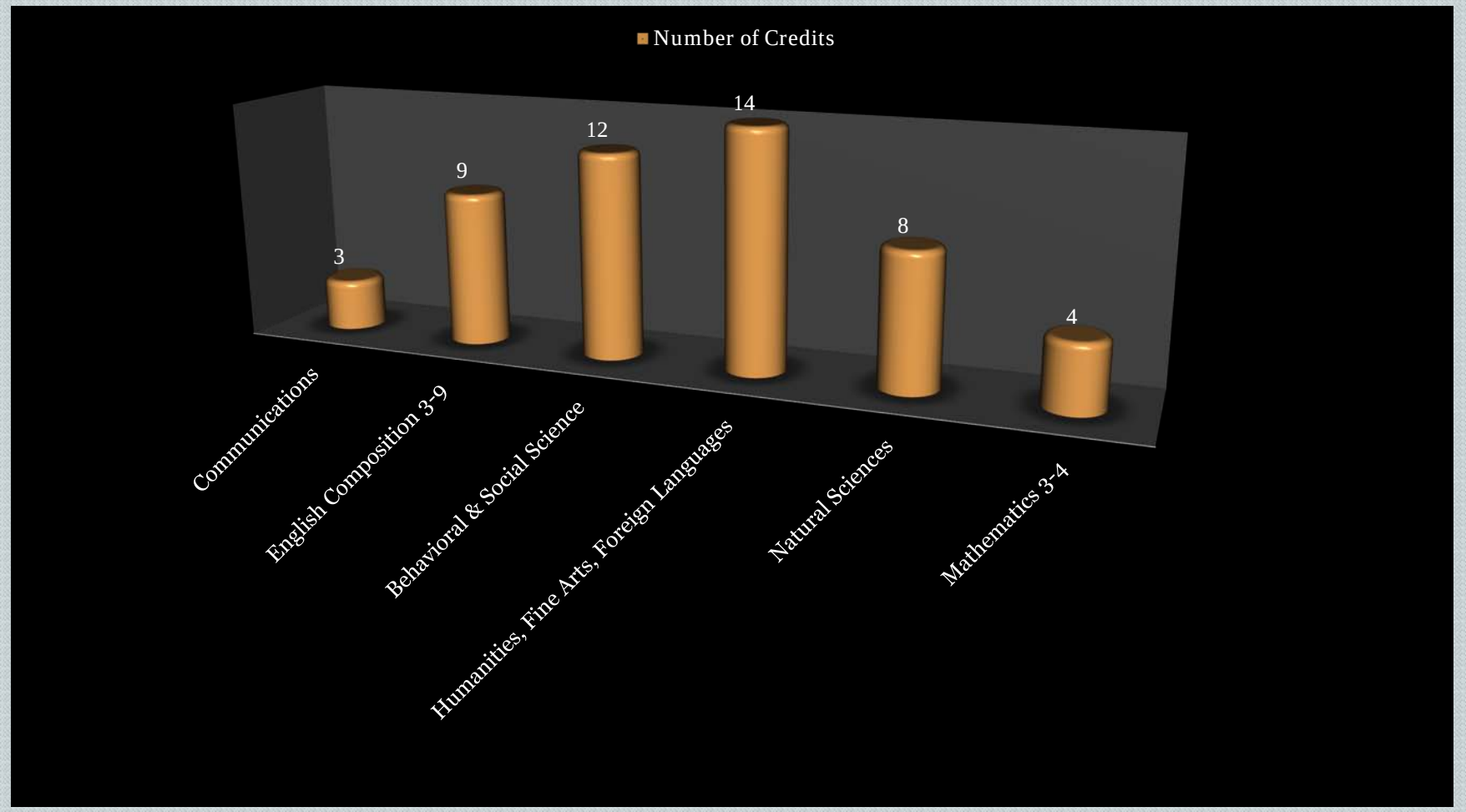
LCSC General Education Core



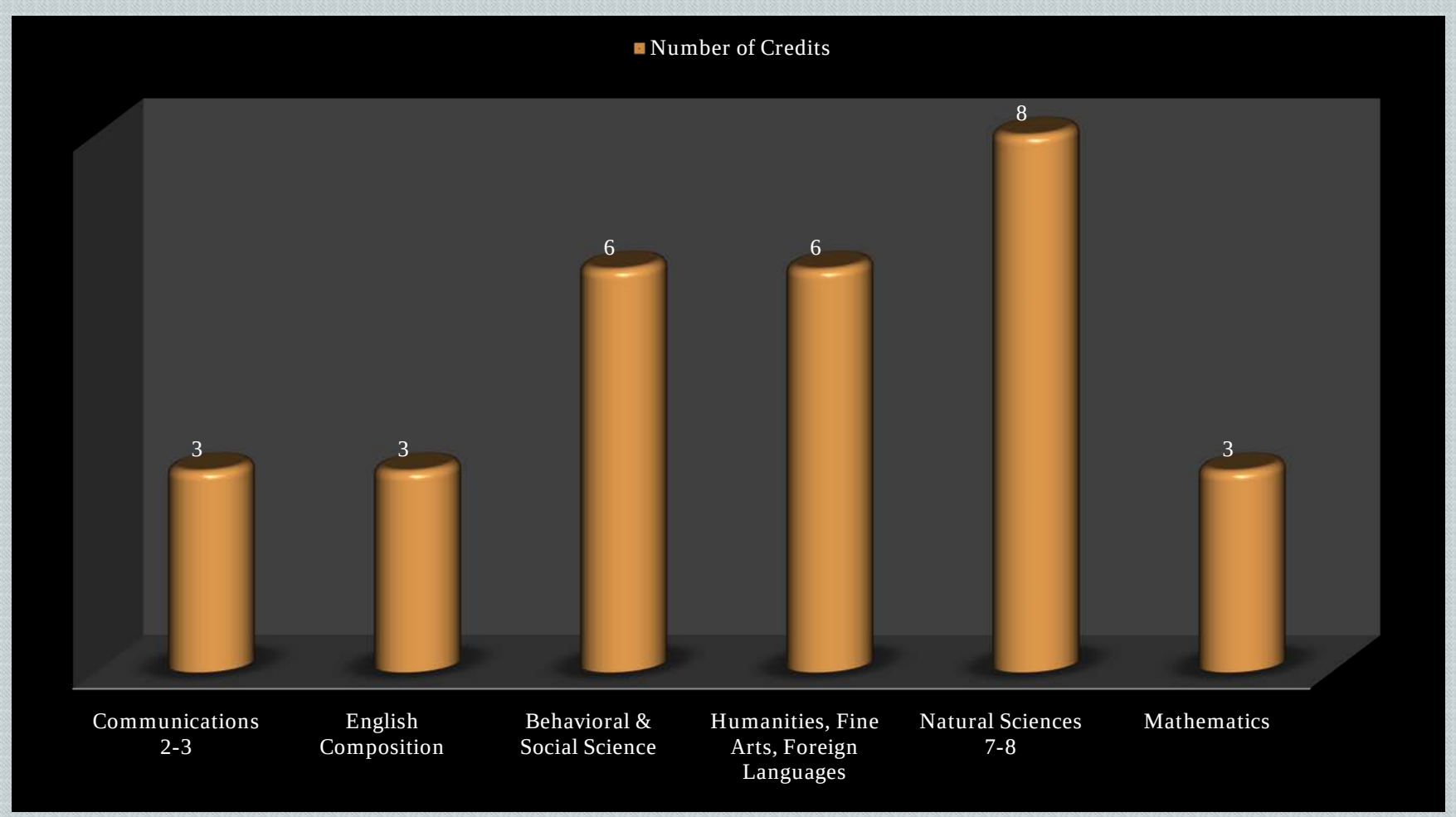
BSU General Education Core



ISU General Education Core



Uof I General Education Core



Idaho has achieved

transfer agreements online

centralized search on the Board website

Board Policy revisions

Idaho postsecondary institutions collaborate

- Registrars meet regularly and review transfer and articulation agreements
- A work group is developing expanding transferability
- Local Operations Committees are reviewing "swirling" enrollments

How do our students view transfer options ?

UNIVERSITY OF IDAHO
COLLEGE OF SOUTHERN IDAHO
BOISE STATE UNIVERSITY
IDAHO STATE UNIVERSITY
EASTERN IDAHO TECHNICAL COLLEGE
COLLEGE OF WESTERN IDAHO
NORTH IDAHO COLLEGE
LEWIS AND CLARK STATE COLLEGE

http://www.boardofed.idaho.gov/public_col_univ/credit_transfer.asp

http://www.collegetransfer.net/

Idaho offers specialized MOUs

MORE THAN 100 ARTICULATIONS ARE OFFERED AMONG STATE AND INTERNATIONAL INSTITUTIONS FOR COURSE TRANSFER

Contemporary Options

Commercial transfer options

- Academy One

  http://www.academyone.com

- Red Lantern

  http://www.redlanternu.com/

- CAAS

  http://www.caas-cw.org/

In-house transfer projects

- Access Idaho
- Home grown
- Interinstitutional collaborations

Students from anywhere in the country can evaluate their credits for transfer to Idaho

Students in all parts of the world could match their course work to Idaho colleges and universities

More students would consider Idaho as their college choice

Provides competitive advantage for dual credit high school students from in state and out of state

Why do many states provide online portals to promote course transfer?

Recommendations

- Continue to streamline online transfer portals
- Develop shared repository of transfer articulations
- Expand 2+2 articulations between institutions
- Continue to advise students on navigating the transfer process options
- Engage in research and funding that streamlines the portability of college credits
- Develop common course numbering where applicable
- Affirm Board policy on transfer
- Continue pilot project with transfer.net