ACTION ITEM

SUBJECT

ACCEPTANCE OF COMMITTEE MINUTES

BOARD ACTION

A motion to approve the following standing committees' minutes as written as consent agenda items:

Council on Academic Affairs and Programs August 30, 2001 meeting (see pages 3-4)
Higher Education Research Council June 5, 2001 meeting (see page 5)

Moved by_____ Seconded by_____ Carried Yes_____ No_____

Approved Minutes

Council on Academic Affairs and Programs

August 30, 2001 • 9:30am – 12:30pm
LBJ Building • Boise, Idaho

Present:	Jerry Beck, CSI	Rita Rice Morris, LCSC	Nancy Szofran, OSBE
	Daryl Jones, BSU	Mary Ann Carlson, EITC	Patty Sanchez, OSBE
	Jonathan Lawson, ISU via phone	Mike Falconer, SDPTE	Jimmi Sommer, OSBE
	Brian Pitcher, UI	Dan Petersen, SDPTE	

Absent: Bob West, SDOE

1. Minutes of May 31, 2001 CAAP Meeting

It was agreed by consensus to approve the minutes of the May 31, 2001 meeting.

2. Minutes of July 26, 2001 CAAP Meeting

An inquiry was made about the status of releasing the funds for the four regional collaborative centers. The July CAAP minutes indicated that the Presidents would be meeting regarding the recommendations on how to expend the available monies for Magic and Treasure Valleys. To CAAP's knowledge, this has not yet been accomplished nor has it been placed on the President's Council meeting agenda for action. Jonathan Lawson and Brian Pitcher offered to get this item placed on the President's agenda at their next meeting, held September 11, 2001.

Keith Hasselquist was invited into the meeting to give a quick update on the status of the release of funds for the centers. He assured CAAP that he had the information he needed to prepare the release of the monies. He added that the monies have not yet been released but he will be working through the process. He confirmed with CAAP that the monies for NIC would come through UI and UI would bill NIC. It was recommended that EITC monies come through ISU instead of UI.

It was agreed by consensus to approve the minutes of the July 26, 2001 conference call meeting with an amendment on page 2.

3. Notices of Intent:

a. Bachelor of Arts in Environmental Science**-BSU**

Daryl Jones briefly discussed BSU's intent to offer a Bachelor of Arts in Environmental Studies. He noted that this would be a broad-based, interdisciplinary, liberal arts program to gain perspective on environmental issues. BSU seeks CAAP's recommendation for Board approval of the program without the development of a full proposal.

It was agreed by consensus to recommend to the Board approval of the above notice of intent without the development of a full proposal. This notice of intent will be added to the Board's September 20-21, 2001 meeting in Pocatello.

4. Professional Programs Analysis

A discussion ensued about the direction CAAP would take with their response to the Board regarding differential fees. Patty Sanchez provided minutes of the Board's April meeting that indicated the Board's charge to CAAP. Essentially, CAAP determined to take a different approach and forward to the Board, each institution's position statement along with the analysis/survey prepared by Jimmi Sommer for the Board's review and discussion. Rita offered to work with Greg on a coversheet that will summarize each statement for the Board.

5. Nancy Szofran-Update

Nancy Szofran distributed an information paper outlining updates of projects she is currently working on. A brief discussion ensued regarding the possible negative repercussion if the institutions' newspapers were linked on the Idaho Electronic Campus website. Due to CAAP's concerns, it was agreed not to add links for institution newspapers on the website.

Nancy inquired if CAAP wished to have the submission/review process of the Technology Incentive Grant Program evaluated for FY03. She added that the RFP would need to be revised and presented to the Board as soon as possible in order to release the RFP by November. CAAP had no recommendations or plans for changing the process. Nancy will prepare a draft with the current process and present to CAAP at their September meeting.

Nancy reported that she is creating an online survey of the Idaho Technology Incentive Grant Program (ITIG). In order to facilitate this, she requested of CAAP the faculty name, course name, and course number of the ITIG program courses being taught on-line. She requested that this information be sent to her by **September 10, 2001** in a word document to only include those courses taught and funded by technology grant funds.

Meeting adjourned at 11:30am.

MINUTES

HIGHER EDUCATION RESEARCH COUNCIL MEETING

June 5, 2001
LBJ Building, Boise, ID - Room 324 / 11:00 pm – 11:30 pm

Present:

Darrell Manning, Chair	Richard Bowen	Daryl Jones	Robin Dodson
Ron Bitner	Bob Hoover	Niel Zimmerman	

Absent: Bill Shipp John Huffman Dennis Stevens

I. Minutes of March 6, 2001

MSC(Hoover/Bitner): To approve the minutes of March 6, 2001.

II. RCGP On-Site Review Panel Recommendation

The RCGP On-Site Review Panel made the following recommendation to HERC regarding the three research centers that were competing for the 2002 Research Center Grant Competition.

The Idaho Accelerator Center is ranked first and should be funded.
The Center for Biogeochemical Systems Research is ranked second.
The Formation of the Northwest Information Assurance Research Partnership is ranked third.

MSC(Hoover/Zimmerman): To accept the recommendation of the RCGP On-Site Review Panel to fund the Idaho Accelerator Center.

III. Other

Dr. Hoover raised the issue of security at University of Idaho's new Biotechnology Laboratory. There has been $50,000 worth of damage to the new building, and other universities have had similar problems with their biotech labs. The Earth Liberation Movement in particular is opposed to the kind of research that the lab will be performing. He mentioned that this issue of security, especially in the areas of biotechnology and genetic research, has not been addressed by this group, and it is an important issue that should be addressed. Dr Hoover recommended that it be an agenda item in the near future and that the issue be further explored.

The meeting was adjourned at 11:30 a.m.

ACTION ITEM

SUBJECT

PROGRAM CHANGE REQUEST--MASTER OF PHYSICIAN ASSISTANT STUDIES

BACKGROUND

In accordance with Board policy, all new academic and professional-technical programs must have full Board approval prior to implementation or inclusion in the SBOE's fiscal year budget request. The CAAP committee, based on its guidelines for program review (i.e., of quality, centrality to role and mission, duplication, demand/need, and resources) has acted on the IRSA charge to evaluate new program requests.

DISCUSSION

ISU has forwarded a program change request to convert the degree level of its Physician Assistant Program from the current baccalaureate level to the master's level, which will include rearrangement and augmentation of program content.

A majority of PA programs are in the process of converting to the graduate level. The University of Utah, Oregon Health Sciences University, and Pacific University have already converted to the master's level. Nationally, the student demand, as well as for the ISU Program, exceeds the available seats by a factor of 6 to 1. Applicants seek the master's degree, and apply to programs granting that degree. Additionally, the US Department of Labor lists physician assistant as one of the fastest growing health professions, with high levels of market demand projected through 2010. Graduates of the ISU program find employment as PAs within 2.5 months of graduation. The ISU Physician Assistant Program has been in existence since 1995, and is currently the only PA program in Idaho.

IMPACT

If Board approved, the institutions requesting these new programs will be subject to future monitoring for program compliance.

FISCAL IMPACT

There is a proposed new faculty position request (12mo., 1 FTE) to be added by Fall of 2002 if approved. No additional staff or space is required. The capital expenditures include classroom renovation to accommodate six additional students approximately $500 (no other capital expenditures are required).

RECOMMENDATION

Both CAAP and Board Staff recommend approval by IRSA and the full Board.

BOARD ACTION

A motion to approve Idaho State University's request to change the Physician Assistant Program from the existing baccalaureate level to the master's level.

Moved by_____ Seconded by_____ Carried Yes_____ No_____

ACTION ITEM

SUBJECT: PHYSICAL AND OCCUPATIONAL THERAPY PARTICIPATION IN THE WICHE PROFESSIONAL STUDENT EXCHANGE PROGRAM

BACKGROUND AND DISCUSSION

The Department of Physical and Occupational Therapy at Idaho State University requests that the Board approve its participation as a "receiving" institution under the Western Interstate Commission of Higher Education (WICHE) Professional Student Exchange Program (PSEP). Idaho State is currently the only institution in the northwest that does not accept out-of-state WICHE certified students in physical therapy and only one of two schools that do not accept WICHE certified students in occupational therapy.

WICHE staff has granted permission for Idaho State University's Physical and Occupational Therapy programs to train exchange students through the PSEP pending State Board of Education approval (see attachments pages 8-11).

IMPACT

Historically, Idaho residents have had priority for admission into the physical and occupational therapy programs. The qualified applicant-to-acceptance ratios have approached 80% in recent years, but a number of seats have been left available in each program. Physical and occupational therapy programs that are not receiving students through the WICHE-PSEP are at a competitive disadvantage in attracting students from out-of-state since their home states do not provide financial support to attend a program that is not a PSEP participant. Six (6) states currently support students in physical therapy and seven (7) states are supporting students in occupational therapy.

FISCAL IMPACT

Income to the University from WICHE sponsored students would currently be $12,764 per student, which includes the in-state fee of $3,384, a professional fee of $980, and the annual WICHE support fee of $8,400, paid by the sending state. While out-of-state students without WICHE support would pay slightly more to attend ISU ($13,060), if they do not attend because the ISU programs are not PSEP participants no revenue is recognized.

RECOMMENDATION

Staff recommends the approval of Idaho State University's request to allow its Physical and Occupational Therapy programs to participate in the WICHE Professional Student Exchange Program as a "receiving" school.

BOARD ACTION

A motion to approve Idaho State University's physical and occupational therapy programs' participation in the WICHE Professional Student Exchange Program.

Moved by_____ Seconded by_____ Carried Yes_____ No_____

WICHE Support Letters

Please contact Patty Sanchez at (208) 332-1562 or email psanchez@osbe.state.id.us to obtain hard copies of these items (pages 8 - 11).

ACTION ITEM

SUBJECT

DIFFERENTIAL FEES PROPOSAL - UNIVERSITY OF IDAHO

BACKGROUND

In September, the Board was presented with a position statement from each institution in support of and opposed to differential fees and a Professional Program/Fees Analysis was prepared for the Board's review. The Board discussed with the academic officers the advantages and disadvantages of differential fees and ultimately, the Board allowed the University of Idaho to bring back a proposal to implement differential fees on a limited basis (see pages 14-17). The proposal must include discussion of the impact on students, information regarding dialogue with the students, impact on fellow colleges, impact on departments within the university, and impact on the state funding formulas. In response, the University of Idaho is presenting a proposal to charge a differential fee to students enrolled in its Integrated Business Curriculum for the Board's consideration.

DISCUSSION

The Integrated Business Curriculum (IBC) is a 17 credit hour program that makes up the junior level common curriculum requirement for all students in the College of Business and Economics (CBE). In the past, students took a set of seven courses (21 credit hours) that were built around functional areas within a firm such as marketing, management, production and finance. The IBC program has added new material including team building and leadership.

The IBC development process began in 1993. Corporate stakeholders were concerned about the difficulties in getting business school graduates to see beyond their own functional discipline. The existing business curriculum, both at the University of Idaho and other business schools, had resulted in functional areas becoming increasingly isolated into silos. These silos operated as though they were actually separate business units often to the detriment of the firm. In addition, business graduates were having difficulty functioning in a business environment that was increasingly team-oriented. Businesses were attempting to break down barriers between silos by using cross-functional teams. However, University of Idaho graduates, like all other business school graduates, had very little raining or practice in developing the skills necessary for successfully functioning in teams.

IMPACT

The IBC program offers students a unique learning experience that provides them with a competitive advantage in their career. The quality of the program has been recognized by students, corporate stakeholders (the Association to Advance Collegiate Schools of Business, International), and by other independent sources such as *U.S. News and World Reports.*

DIFFERENTIAL FEES PROPOSAL - UNIVERSITY OF IDAHO **(continued)**

FISCAL IMPACT

If the Board approves the development of a differential matriculation fee proposal for the IBC, the fiscal impact will be identified in the University of Idaho's fee proposal for FY03.

RECOMMENDATION

The Board has previously authorized the University of Idaho to develop a test case for the application of a differential matriculation fee. CAAP reviewed and discussed the materials related to the IBC and forwards the proposal without a specific recommendation.

BOARD ACTION

A motion to approve the Integrated Business Curriculum at the University of Idaho as an appropriate program for a test of differential matriculation fees and authorize the University of Idaho to develop and propose to the Board a specific differential fee proposal for this program.

Moved by_____ Seconded by_____ Carried Yes_____ No_____

Differential Matriculation Fee Proposal
College of Business and Economics
University of Idaho
October, 2001

Introduction

The University of Idaho recommends the Integrated Business Curriculum (IBC) in its College of Business and Economics as an appropriate program for testing a more flexible and market-oriented approach to setting the matriculation fee. In the following brief, we provide background information about the IBC that supports this recommendation. We ask that the IRSA committee review these materials and approve the program as appropriate candidate for the development of a specific fee proposal. If the Board approves this recommendation, then the University of Idaho will develop a specific fee request for upper division students in the IBC program that will be presented to the BAHR committee in April of 2002. If the Board does not concur with our selection of the IBC, then we will seek another program to serve as a test case.

Integrated Business Curriculum

The IBC is a 17 credit hour program that makes up the junior level common curriculum requirement for all students in the College of Business and Economics (CBE) . In the past, students took a set of seven courses (21 credit hours) that were built around functional areas within the firm such as marketing, management, production and finance. The IBC program has also added new material including team building and leadership.

The IBC development process began in 1993. Our corporate stakeholders were concerned about the difficulties in getting business school graduates to see beyond their own functional discipline. The existing business curriculum, both at the University of Idaho and other business schools, had resulted in functional areas becoming increasingly isolated into 'silos'. These 'silos' operated as though they were actually separate business units often to the detriment of the firm. In addition, our graduates were having difficulty functioning in a business environment that was increasingly team-oriented. Businesses were attempting to break down barriers between silos by using cross-functional teams. However, our graduates, like all other business school graduates, had very little training or practice in developing the skills necessary for successfully functioning in teams.

It became clear to the CBE faculty that change was needed and a curriculum task force representing all of the functional areas in the college was created to begin re-engineering the curriculum. The CBE spent nearly a year collecting information from students, the corporate sector, faculty and alums. The result was a curriculum that helped the CBE win the Idaho Quality Award (IQA) in 1999. In their review of the CBE program, the IQA review team made the following comments on the program.

The IBC program is a good example of how strategy has been developed and executed in response to environmental conditions. The IBC implementation has resulted in improved faculty communications, cooperation, and culture. It has also resulted in an elimination of redundancy and has improved consistency allowing for more material to be covered in less time. (Team Summary, Idaho Quality Award, March 3, 1999).

IBC Value Recognized

The CBE faculty has also continued their internal assessment of the IBC program. Faculty members have received numerous unsolicited testimonials from former IBC students. A modest sample is reproduced below.

Nick Gebhart, Stryker Endoscopy (Human Resource Management Major)
I am happy to say that IBC prepared me well for exactly what I do on a daily basis..... With this enthusiasm I hope to attract more Idaho business majors to Stryker. (E-mail 1/31/2000)

T.J. Barnhart, Marketing Intern Netivation, Inc. (Marketing Major)
IBC definitely prepared me well. (E-mail 6/6/2000)

Ken Wood, Intern, Micron Technology (Production/Operations Management Major)
It is amazing how many things that we went over in IBC actually apply to this job. (E-mail 6/22/2000)

Matt Cram, Intern, Boeing (Economics Major)
Amazingly enough the stuff we learned in IBC is actually used in the real world. (E-mail 6/8/2000)

Ted Beckman, U.S. West (Information Systems Major)
I know that the experience I got from the Help Desk is what got me the job and is helping me with the technical parts of the job, but it is the education that I got from IBC that will help me to excel in a career path with US West. (E-mail 2/10/2000)

John Pappendorf, Finance Major
IBC changed my life! (Personal communication to faculty member, 10/11/2000)

Steve Palmer, Management Trainee, Enterprise Car Rental (Production/Operations Management)
Keep working those IBC students. What they learn is very valuable and it is a good way to learn some great work habits and to want to learn. (E-mail, 9/2/2000)

Monica Wilson, Intern, Weyerhaeuser Company (Accounting Major) Referring to her assignment assisting with the implementation of an ERP system.
I'll be applying what we learned last semester (in IBC). Thanks!

In addition, in a recent study conducted by two CBE faculty members, Byers and Stover (2000), the initial IBC class (1994) was compared with students who took the traditional program. The study found that IBC students found initial employment 76% sooner than their traditional curriculum counterparts. IBC graduates also started at a higher salary earning on average 11% ($2,876) more than traditional program counterparts. A second study completed by two other CBE faculty members Pharr and Lawrence (2000) compared IBC student performance on post-IBC course work with traditional curriculum students and found that the IBC students performed better in their senior courses.

The CBE also has recently (2000) completed an accreditation review by The Association to Advance Collegiate Schools of Business (AACSB, International) who called the IBC program "an innovative program that complements the goal of becoming the residential

institution of choice in the Northwest." Last year the CBE was ranked (134th) for the first time in the *U.S. News and World Reports* ranking of the nation's best undergraduate business programs. This year our program moved up to a ranking of 114th. The CBE is the only Idaho Business program to make this list. This combination of empirical support, outside evaluation, and personal testimonials support the University's position that the IBC is indeed a unique program that differentiates the University of Idaho's undergraduate business program.

Operational Issues

Initially, the IBC was delivered by a team of six faculty members from different functional areas including marketing, finance, human resources management, production and operations management, information systems, and economics. The team approach was necessary to achieve the cross-functional perspectives demanded by the college's corporate stakeholders. In addition, the program made extensive use of faculty mentors for student teams. In this role as mentor, faculty members meet with their student teams to discuss progress on case assignments and provide general guidance and coaching for required professional presentations. Last spring an IBC planning task force reviewed resource constraints and developed a plan to move to a five-person faculty team and reduce the credit hours in IBC by one credit hour to 17. The faculty members believe we can maintain the quality of the program as redesigned by the task force but are convinced that further reductions in faculty team size or credit hours will jeopardize our ability to maintain the unique quality of this program.

The college has maintained a section enrollment cap of 60 students per IBC section. This cap is unusually low for upper division courses in business but is required for two reasons. First, the program requires student teams to develop professional presentations each semester. These presentations are important for developing the team and communication skills that are essential for the students' success in business. Each time the enrollment cap was increased enough to accommodate an additional student team, the faculty had to shrink the classroom presentations by two class hours in order to allow time for new student presentations. Since the IBC design reduced the original core requirement from 21 to 17 credit hours, class time is very valuable, and our faculty believe further reductions would jeopardize specific content requirements. In addition, to be effective, faculty mentors must spend considerable time with their student teams. Student team sizes have been increased to five or six in order to maximize faculty mentoring time available to each student team.

The IBC curriculum also demands considerable faculty planning time in order to coordinate material and provide cross-functional perspectives on the business issues presented in the classroom. Faculty teams meet in the summer to plan course material for the next year. The outcome of that planning is an hour-by-hour schedule detailing subjects, speakers, exercises, and classroom materials. In addition, the faculty teams have regular weekly meetings during the school year to preview the coming week's material, review tests and exercises, and tend to administrative matters such as grading. During the first year on an IBC team, faculty members are also responsible for attending all of the classes lead by other faculty in order to improve their own cross-functional skills. In subsequent years faculty members attend at least one hour daily in each section as well as any classes immediately preceding material that they are responsible for delivering. The faculty class attendance policy insures better coordination and integration of material and provides resources for discussions with student teams working on in-class exercises.

In summary, the resource demands for this unique approach to undergraduate business education are unusually high when compared to traditional pedagogy in other business curricula.

IBC Summary

The IBC program offers students a unique learning experience that provides them with a competitive advantage in their career. The quality of the program has been recognized by our students, our corporate stakeholders, our accrediting body (The Association to Advance Collegiate Schools of Business, International), and by other independent sources such as *U.S. News and World Reports.* The success of this program has led to growth in enrollments and growing demand for access to the program. The University of Idaho believes that we can leverage this unique approach to business education to enhance our image and reputation in the Inland Northwest and nationally by featuring it in our national marketing campaign.

We believe that there is ample evidence that the IBC is an expensive, high quality, high value approach to undergraduate business education. We would like expand access to this program. We believe that there is ample demand to sustain rapid enrollment growth. Given the design of the IBC, we believe that the CBE faculty have taken every reasonable and prudent step to ensure that they deliver this curriculum in an efficient manner.

Thus, the University of Idaho faces three basic alternatives relative to expanding access to the IBC.

1. We can cap enrollments in the IBC and limit access. This choice will deny access to the program to students who are both willing to and capable of paying for it.

2. We can increase mandatory fees to all students and reallocate General Account funds to provide the resources needed to grow the IBC. This is the way increased access was funded in FY02 and it is the traditional method of assessing costs.

3. We can selectively increase the matriculation fee for the students in the IBC who directly benefit from this unique approach to business education.

We believe that the IBC represents an appropriate curriculum with which to test the use of a more flexible approach to setting mandatory fees. We are confident that the College of Business and Economics can generate sufficient private funds for need-based financial aid to mitigate any impact that a higher fee for upper division courses might have on needy students. Thus we seek your approval of this program for the test that you authorized at the September Regents meeting. If you approve this program, we will proceed to develop a specific fee proposal that will be presented to you along with our other fee issues in April.

ACTION ITEM

SUBJECT: HIGHER EDUCATION RESEARCH COUNCIL REAPPOINTMENTS

BACKGROUND

The Higher Education Research Council (HERC) is comprised of the Presidents of the State College and Universities, four non-institutional representatives and the Governor's Statewide Science & Technology Advisor. Two of the non-institutional representative positions, currently held by John Huffman and Dr. Dennis Stevens, are up for reappointment. The term of appointment for non-institutional positions is three years.

DISCUSSION

John Huffman received his degree in Mechanical Engineering from Oklahoma State University. In 1979, Mr. Huffman went to work as an R&D Development engineer for Hewlett Packard in Boise, Idaho. At HP he worked on a wide range of impact and laser printer products and has 8 patents related to printer design. He received his M.S. in Mechanical Engineering from the University of Idaho in 1986, concentrating on composite material design. John is now an R&D Project Manager and works closely with Japanese companies developing the next generation of HP LaserJet printers for worldwide markets. Mr. Huffman was originally appointed to the HERC in January 2000 to establish staggered terms for the non-institutional HERC representatives.

Dr. Dennis Stevens is an internationally recognized scholar in infectious diseases and is currently the Chief of Infectious Diseases Section at the Veterans Affairs Medical Center in Boise. Dr. Stevens was appointed to HERC in 1995 and reappointed in 1998 both for three-year terms. Dr. Stevens is heavily involved in research in his capacity at the Veterans Affairs Medical Center. He strongly believes in cultivating partnerships between institutions and the private sector and initiated a collaborative program that provided Idaho Microbiology students with the opportunity to complete research projects in his laboratory at the VA Medical Center.

Mr. Huffman and Dr. Stevens have confirmed their interest in continuing their service on the Higher Education Research Council.

IMPACT

Reappointing Mr. Huffman and Dr. Stevens to the Council will provide continuity to HERC's initiatives currently in progress, including the Statewide EPSCoR Review.

RECOMMENDATION

Staff recommends the reappointment of Mr. Huffman and Dr. Stevens to the Higher Education Research Council.

BOARD ACTION

A motion to reappoint Mr. Huffman and Dr. Stevens respectively for three-year terms, November 2001 – November 2004, on the Higher Education Research Council.

Moved by_____ Seconded by_____ Carried Yes_____ No_____

INFORMATION ITEM

SUBJECT

FY02 FUNDING REPORT FOR COLLABORATIVE CENTERS

BACKGROUND

The SBOE's FY02 request included a $2.0 million item for "collaborative centers." The 2001 Legislative Session did act to fund this request at the $1.0 million level. In both the Board's budget request and the JFAC Action Program Proof Language, the funds are to be held by OSBE, and each year, an Oversight Council shall allocate the funds to each center. The SBOE requested that CAAP develop a recommendation on what defines a center and how those funds were to be allocated.

DISCUSSION

In anticipation of the Legislature requesting a report on this information, Staff have obtained information and prepared brief reports on how Idaho's institutions have utilized the monies on these newly funded initiatives. (see pages 20-21)

FISCAL IMPACT

Each institution was awarded the following:

Boise State University:	$145,900
Idaho State University:	$408,300
University of Idaho:	$370,800
Lewis-Clark State College:	$ 75,000
Total	$1,000,000

BOARD ACTION

No action required.

FY02 Collaborative Centers Report

Boise State University--Collaborative Centers

Magic Valley

Currently, funds designated for the Magic Valley are being used to support Boise State's delivery of upper-division Business and Criminal Justice Administration programs in collaboration with the College of Southern Idaho in Twin Falls. Specifically, for FY02 the funds are allocated for support of the program coordinator and travel costs for faculty. In the future, funds may be used for lease of space from CSI.

Treasure Valley

Currently, funds designated for the Treasure Valley are being used to fund a Financial Aid Counselor position, plus a small amount of equipment and operating expenses, to process federal financial aid for students living in Boise and enrolled in courses at Boise State University and another state institution during the same semester. In addition, funds are being used to lease off-campus space for shared use by the Boise State University Department of Art and the University of Idaho Architecture Urban Design and Research Program.

Idaho State University--Collaborative Center funds

These funds are dedicated for use in Idaho Falls, Twin Falls, Boise, and Coeur D'Alene. Funding will be used to provide infrastructure and for mission specific programming. Programmatic examples include a variety of Health Professions programs, which include additional two way video and audio distance- learning rooms in both Coeur d'Alene and Boise. A Master of Science in Nursing is being delivered in Coeur d'Alene, an M. S. in Clinical Laboratory Science and a B. S. in Medical Technology in close collaboration with regional hospitals is being offered in Boise and Twin Falls. The Deaf Interpreter program is also now being delivered in Twin Falls. Infrastructure examples include a security officer at the ISU/UI Center for Higher Education in Idaho Falls and Information Technology staff support is being funded in Boise.

Lewis-Clark State College--Collaborative Center - NICHE

Funds were added to reallocated general fund resources for the following purposes:

- Stabilize current staff
- Create new support staff position
- Increase faculty in Justice Studies program
- Create new position in Social Work to be shared with NIC
- Development of new programming

FY02 COLLABORATIVE CENTERS REPORT--(continued)

University of Idaho

Summary of Collaborative Program Allocations

UI passed through part of its allocation to NIC as directed by the Board.

In Idaho Falls, the funds are being used to address infrastructure issues associated with the operation of the center, occupancy of the Bennion Center, and support for current academic programs. In Boise, the funds are also being used to address infrastructure issues associated with the operation of the Boise center. In addition the allocation is being used to fund the expansion of the Idaho Urban Research and Design Center (IURDC) to achieve the following program objectives:

1. *Broaden college participation in IURDC program*. Currently the Department of Architecture is the only college participant in the IURDC. The intent of this objective is to foster participation by students and faculty in the Department of Landscape Architecture, Interior Design Program, and Department of Art.

2. *Expand IURDC partnerships with associations and agencies in the Treasure Valley*. A considerable number of partnerships have been developed in the past two years. This objective is to expand these partnerships through joint research and outreach activities.

3. *Strengthen partnerships with BSU*. Currently, the IURDC jointly occupies space with BSU's Department of Art in Boise. In addition, IURDC faculty participate with students in BSU's pre-architecture program. The aim of this objective is to build partnerships with other BSU academic programs, such as public administration, and construction science, and capitalize on these partnerships for the development of the Master of Science in Architecture Degree.

In Cd'A, the allocation will be used to address infrastructure issues associated with UI's move into the Harbor Center, especially those operating issues not addressed by the occupancy cost formulas. A portion of the allocation will also be used to expand program offerings in North Idaho based on on-going market surveys.

INFORMATION ITEM

SUBJECT

FY02 FUNDING REPORT FOR GOVERNOR'S INITIATIVES

BACKGROUND

New funding was made available for FY02 for the following:

New Faculty—With Special Emphasis Areas

The intent of this program was that college and universities utilize $1,325,000 to hire faculty in the areas of health professions, law, science, and engineering. Funds were allocated to the college and universities in the following amounts:

Boise State University	$400,000
Idaho State University	$400,000
Lewis-Clark State College	$125,000
University of Idaho	$400,000

University Research Initiative

The intent of this program was to fund faculty recruitment and infrastructure in areas of key economic growth in Idaho. An allocation of $1,500,000 was distributed to the college and universities. Institutions were required to provide a dollar-for-dollar match from non-state funding sources. Funds were allocated to the college and universities in the following amounts:

Boise State University	$420,000
Idaho State University	$420,000
Lewis-Clark State College	$150,000
University of Idaho	$510,000

DISCUSSION

In anticipation of the Legislature requesting a report on this information, staff have obtained information and prepared brief reports on how Idaho's institutions have utilized the monies on these newly funded initiatives (see pages 23-24).

BOARD ACTION

No action required.

FY02 Governor's Initiatives Funds Report

Boise State University

Governor's Initiative—Special Emphasis Areas

Funds from this initiative were used to expand access to Nursing Education in the Treasure Valley by thirty seats, including 20 at the A.D.N. level and 10 at the B.S.N. level. Funds were used to hire 5.0 FTE Nursing Faculty and two .50 FTE staff and to provide modest operating expense budgets.

College and Universities Initiative

Funds from this initiative are being used to hire 2.0 FTE faculty in Business (Networking and Telecommunication), 1.0 FTE faculty in Mechanical Engineering, and 2.0 FTE faculty in Computer Science.

Idaho State University

Special Emphasis Funds

These funds will be used to support mission and emphasis specific programming. Positions to be funded will be housed in Computer Science, Computer Information Sciences, Geographical Information Systems, and Medical Technology.

Colleges and Universities Initiative

These funds are being used provide staffing in targeted research areas. This includes Nursing, the Institute of Rural Health, the Accelerator Center, and Nuclear Engineering. Each of these areas carries a history of- or prospects for- significant extramural funding. Research funds were also committed to support seven new research assistants to be used in support mission and emphasis critical areas.

Lewis-Clark State College

Governor's Initiative—Special Emphasis Areas

Funds were added to reallocated general fund resources to create:

- Outreach/Nursing Skills Position for Region II
- Half-time position in Medical Assistant Program
- Computer Science faculty position
- Upgrade equipment and curriculum for Computer Science major
- Lecturer positions to support instruction in math and health sciences

FY02 GOVERNOR'S INITIATIVES FUNDS REPORT--(continued)

Lewis-Clark State College

Colleges and Universities Initiative

In consultation with staff from the Governor's Office funds were allocated for the following purposes:

- Development and support for Radiographic Technology program
- Curriculum development for Licensed Practical Nurse program
- Curriculum development for advanced certification in Electronics program
- Development and support for Substance Abuse program
- Economic Development programming

University of Idaho

Governor's Initiative

The UI has used this allocation to strengthen strategic plan science and technology areas in priority research and graduate education programs in Moscow, Boise and Idaho Falls. They include:

1. *UI, Moscow.* The allocation expanded our research capability in molecular biology, bio-remediation, environmental science, computer science, transportation engineering, chemical engineering and materials science. (The allocation includes a Potato Research position funded through the Agricultural Research Budget in FY 2000.)

2. *UI, Boise.* The allocation expanded our research capability in ecohydrology, hydrologic modeling and civil engineering.

3. *UI, Idaho Falls.* The allocation expanded our research capability in subsurface science. (The allocation includes a Hydrology Research position funded through the Agricultural Research Budget in FY 2000.)

INFORMATION ITEM

SUBJECT

INTELLECTUAL PROPERTY POLICY UPDATE

BACKGROUND

This legislative session, the Board successfully requested that the administrative rules on Intellectual Property be repealed, thus allowing the Board to govern intellectual property issues by policy rather than rule. The rule was repealed and put into policy this summer so that there would be a policy in place by the time the repeal of the rule went into effect on July 1, 2001. A Statewide Intellectual Property Policy Review Committee was formed in January and has been working on a complete revision of the new policy, since the policy has not been updated since the early 1990's, and many changes have occurred in the area of intellectual property since that time.

DISCUSSION

Battelle Institute, the consultant of record for the Governor's Council on Science and Technology, has been hired to provide a study and comparison of the intellectual property policies and environment of 10 benchmark institutions in other states (primarily neighboring Western states) as well as a couple of "best practices" models. The initial background research has been completed, and the interviews of a staff member of the central governing board who deals with intellectual property issues at the system level and at least one vice president for research or director of technology transfer at each of the institutions chosen for the comparison have been completed. The consultant, Mr. Hochman, is now in the process of preparing a report that will be presented at the January 2002 Board meeting.

IMPACT

The consulting project will provide information about how institutions formulate and use intellectual property policies in states similar to Idaho. The intent is to use the analysis to develop a policy that balances obligations to the particular institution and to the State of Idaho.

FISCAL IMPACT

Approximately $15,000 to hire the consultant which will be divided according to the pro-rated formula between Boise State University, Idaho State University, Lewis-Clark State College and the University of Idaho. Their presidents have given approval for this expenditure to come from institutional funds, which the board approved at the June 2001 meeting.

BOARD ACTION

No action required.

INFORMATION ITEM

SUBJECT

FY01 AND FY02 IDAHO TECHNOLOGY INCENTIVE GRANT PROGRAM FUNDED PROJECTS

BACKGROUND

The Idaho Technology Incentive Grant (ITIG) program was created in 1997, and has funded 66 projects at a total of $10 million to date.

DISCUSSION

For the Board's information, following this page are two reports indicating technology grant projects that were funded in Fiscal Year 2001 (see pages 27-31) and Fiscal Year 2002 (see pages 32-39).

BOARD ACTION

No action required.

FY 2001 IDAHO TECHNOLOGY INCENTIVE GRANT PROGRAM FUNDED PROJECTS

The Idaho Technology Incentive Grant Program focuses on projects that advance the goals and objectives stated in the State Board of Education's 2000-2005 Statewide Strategic Plan. **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.

Enhancing Problem Solving Skills in Pharmacy Education

Paul S. Cady- ISU
$48,950

The goal of this project is to enhance learning, strengthen problem-solving skills, integrate technology into the pharmacy curriculum, train faculty to develop materials to maximize the use of technology and to improve the quality of distance education. The increasing complexity of drug therapy and healthcare delivery systems has placed great demands upon pharmacy education. It is essential that healthcare professionals be able to gather, organize, evaluate, and share information and knowledge. In order to meet these demands, we are requesting funding to further integrate technology into the curriculum, further develop students' problem solving skills and provide faculty training for maximizing the use of computers in the classroom. **Specifically we have three objectives:**

- Enhance the College of Pharmacy's infrastructure in all instructional areas, allowing all (c.200) students easier access to electronic course information;
- Train faculty in the use and development of instructional technology materials and resources that will optimize student use of electronic information, enhancing student problem-solving skills, and allowing students greater flexibility in learning;
- Provide faculty with a means to immediately assess the level of student understanding of lecture topics and other "live" presentations of information/learning, and enhance communication with students in "distance learning" settings.

ISU Dental Education Digital Technology Grant

Steven W. Friedrichsen- ISU
$69,000

Idaho Technology Incentive Grant funds would be used to purchase, install, and employ the latest dental digital technology in the Idaho Dental Education Program and the newly initated Idaho Advanced General Dentistry Program. The digital technology would be adopted in the patient care process and incorporated into various aspects of the curricula. One part-time faculty member would be appointed to oversee the project and would be involved with both acquisition of equipment and assuring faculty integration of the technology into the program participant's experiences. The project would also serve as a springboard into Idaho State University's initatives in telemedicine.

Instructional Technology Resource Center (ITRC): Course Design and Production

Terry Lay- ISU
$71,125

This Instructional Technology Resource center (ITRC) at Idaho State University is a young and busy center that provides training and hands-on assistance to faculty and staff involved in the instructional program. Although successful in these endeavors, the ITRC has not had the trained staff and adequate facilities to provide design and production support. The Course Design and Production project is a three-year project that will expand the capabilities of the ITRC by constructing and staffing a dedicated production lab and by expanding its instructional design expertise through interactions with faculty facilitated by a faculty internship program. This project begins the next logical step in the development of the Center as a comprehensive resource for faculty at ISU.

D.I.G.I.T.A.L. Lab

Ernest S. Lohse- ISU
$122,110

This proposal develops a digital imaging lab in the Oboler Library on the Idaho State University campus, which will provide a unique facility for faculty and students for the capture, manipulation, and integration of digital images into curricular materials. Original images, specific to the teachers' needs, will be created with digital cameras, flatbed and slide scanners, digital video, and microscopes. The lab will also provide software necessary to edit, store, and catalog the images, as well as to create original interactive multimedia applications. Named the Digital Information, Graphics and Images for PC computers, a local area network dedicated servers,

scanners, digital cameras, digital video recorders, microscopes with CCTV cameras, and software for image capture, multimedia scripting, and database design and development.

A Structure Chart Tool to Improve Programming Students' Design and Parameter Passing Skills
David Volk Beard- ISU
$34,484

The ability to design and develop large complex programs is an essential skill for beginning and advanced programming students. Structure charts can help these students by providing them with a tree-structured visual "mental model" of a large complex program.

ISU proposes a graphical internet-based tool focused on the student that will allow them to create and manipulate structure charts. Using a Apple "MacDraw" style interaction, the proposed tool will facilitate student group work and allow "reverse-engineering" of existing code, so students can see a structure chart drawn from the code they have written. Monitoring software will allow faculty to better understand how students develop these structure charts.

ISU also proposes to incorporate the proposed graphical structure chart tool into one of our sections of CIS220 for comparison with another section that will not use the tool. As part of this course, students in each section will develop six or more structure charts the quality of which will be evaluated for detail, accuracy, and design.

The design of complex programs places significant demands on the over 300 students enrolled in our programming courses each year. This structure chart tool has the potential of helping students' critical thinking skills by allowing them to visualize and manipulate that complexity. With this tool, students will be able to more quickly generate richly detailed program designs visualized with structure charts. This tool will also increase faculty productivity by automatically creating structure charts from programs already written by students and by allowing faculty to visualize how students construct their structure charts.

CoreOnline@boisestate: The Graduated Development Model for Faculty Training and Technology-Enhanced Instruction
Ben Hambelton- BSU
$345,240

Boise State University has identified two significant needs: to improve early student success in introductory general-education and core courses, and the need to infuse technology more broadly into the curriculum *(Needs Assessment Title III Planning Grant Application 1999*; *Meeting the Challenge; Making Connections 2000*). This proposal seeks multi-year funding to systematically increase the number of faculty with the skills to infuse technology into the curriculum and to enhance access and quality through the collaborative development of online course alternatives in core courses and other introductory general-education classes. It proposes an innovative process of team development and implementation over three semesters that allows faculty to incrementally gain experience and expertise in online instructional tools. Specifically, the proposed project will provide training and experience in technology integration to 90 faculty, develop 30 high-quality online versions of core courses or other general-education introductory courses, and provide technical skills training and support for students to ensure their success in online courses.

The focus on core and other introductory classes will result in two important accomplishments: increasing access for students who cannot attend campus classes and facilitating the development of new models of instruction as alternatives to the traditional lecture models most often employed in core courses and general-education courses. This innovative course-development approach is designed to enhance the quality and long-term sustainability of the resulting courses. The development approach also builds capacity at the department level to infuse technology into the curriculum and continue innovations beyond soft-money funding. The project also develops a common student training and support package that will better ensure student success in the online environment.

Supporting Student Success
Rita Rice Morris- LCSC
$115,080

Many colleges must grapple with challenges presented by under-prepared students. Successfully retaining these at-risk students presents unique challenges that range from remedial courses to tutoring, to early warning systems. These students often enter college with provisional or conditional admission status because they score low on standardized tests, have a high-school GPA of 2.0 or below, or score less than 50 on the GED. Additional students place below the required score on placement tests. These students are most at risk for dropping out of college, defaulting on financial aid packages, and academic failure. Like many other

colleges, Lewis-Clark State College has initiated several task forces to look at this problem and identify strategies to reduce risk for these students.

Based on the work of three task forces: Center for Individualized Programs Retention Committee, President's Task Force on Retention, and the Committee to Recommend Success Strategies for Provisionally Admitted Students, we will initiate and implement six technology strategies ***for Support Student Success***.

Restructuring Teacher Eduation: Multimedia/Distance-Delivered Courses for Supporting Student Teachers and Professional Development
Doug Adams- UI
$22,296

A team of three English department faculty, a CTI web designer, and three English teacher-consultants from public secondary schools will develop three upper-division English courses for distance delivery. The project is necessitated by the University of Idaho's current redesign of teacher education and its proposed year-long internship which will prohibit students from completing English course work in a timely manner. Utilizing a combination of web delivery, compressed video, face-to-face contact, e-mail, and threaded discussion, these courses will provide students not only with the opportunity to complete nine credits of English while practice teaching, but also foster an environment in which they can observe application of course concepts. By linking students in various school-site areas across Idaho, the courses will be designed to introduce students to the use of technology as a tool for professional growth and development.

This will be a three-year project with two courses put into development in the first year, the third course begun in the second year and all three delivered and assessed in the third year. The assessment will focus on a comparison of student satisfaction and performance when compared to similar courses given on-campus, the integration of technological resources into the students' coursework, teaching, and subsequent career, and the cost effectiveness of presenting these courses in a distance-education environment.

Grant funds will be used to hire technology expertise, to provide release time for English Department faculty to work on creating new, multi-media course delivery systems, to provide recompense for public-school teachers for their input and expertise, and to buy the necessary computer hardware and software to support the development of such courses.

Mathematics Learning Center
James Calvert- UI
$100,000

The Mathematics Department at the University of Idaho proposes to develop a mathematics learning center modeled after the successful Mathematics Emporium at Virginia Tech University. The center will use computer technology in creative ways to deliver several mathematics courses, to support other mathematics courses, and to serve the entire university community as a resource in which students and faculty can refresh their knowledge as the need arises to apply mathematics in course work and research.

Rationale for the Project

- Relieve the current bottleneck in mathematics by improving student success rates.
- Challenge students and assist them to become active learners and effective problem solvers.
- Provide diverse ways to accommodate student learning that build confidence of ability to succeed in mathematics.
- Give students the opportunity to progress as fast as they can in this review of previously studied mathematical topics.
- Support each student by providing a mechanism to return to the mathematics department for assistance in applying the mathematics we teach when the occasion for its use arises in future courses.
- Instill a firm basis of mathematical skills and conceptual understanding that enables the student to succeed in subsequent mathematics courses.
- Reduce the salary costs required to teach pre-calculus mathematics.

Development of Four-Technology-Enhanced Graduate Courses in Natural Resources
Aton Campbell- UI
$50,000

The College of Natural Resources proposes to develop four graduate courses that will become cornerstones for our distance education program. The four courses (Wildland Restoration Ecology, Fire Ecology, Aquatic Restoration Ecology, and Human Dimensions in Restoration Ecology) will serve triple duty as a part of our on-campus CNR graduate program, as a part of the innovative, off-campus Masters of Natural Resource

program (MNR), and as a part of a potential 12-credit, certificate program in "Restoration Ecology."

The web-enhanced courses will integrate technology into the curriculum, enhance the rate and quality of student learning, increase access to educational programs and increase faculty productivity. Web enhancements will include developing critical thinking skills through intensive writing assignments and threaded discussion groups, accessing information and literature through the web, and developing numerous multimedia case studies illustrating restoration theory, applications, and issues. All courses will use WebCT 3.0 combined with Learning Suite to provide a common interface through Campus Pipeline.

An Integrated Spatial Technology Lab for GIS, Remote Sensing, and GPS
Kang-tsung Chang- UI
$50,000

Designed to work with spatially referenced data, such as land use, topography, hydrology, soils, and population distribution, spatial technologies have become part of mainstream information technologies. Geographic information systems (GIS), remote sensing, and global positioning systems (GPS) are spatial technologies that complement each other and, when used together, form a powerful suite of tools for processing and analyzing spatial data. The current setup for access to spatial technologies in the UI College of Mines and Earth Resources inhibits the integration of these technologies because of insufficient equipment using different computer platforms and operating systems. This project proposes to develop an integrated spatial technology lab in the College of Mines and Earth Resources to enhance its teaching and research in GIS, remote sensing, and GPS--on and off campus. The spatial technology lab can directly benefit instructors and students in seven GIS- and remote sensing-related courses offered at UI. The lab is also critical to the success of the proposed UI GIS certificate program, a program designed for recent graduates and professionals who are interested in retraining or upgrading their skills in GIS and remote sensing. A strong demand for the certificate program exists in the Pacific Northwest and Alaska. The certificate program may also attract students from East Asia.

A Model for Conservation and Efficient Use of Idaho's Academic Research: Statewide Graduate Environmental Science Course Offerings
Margrit von Braun- UI
$47,086

The purpose of this project is to provide professional/graduate level courses and degrees in Environmental Science (EnvS) to students throughout Idaho in cooperation with ISU, BSU, and NIC.

The program will support the enrollment of part-time nontraditional students in six new courses delivered by compressed video and web-support. The proposed project will build upon accomplishments of a current SBOE ITIG grant for EnvS undergraduate courses by adding graduate/professional level courses to the offerings. The project models conservation of natural resources, by efficient use of existing academic resources in 8 departments and 5 colleges.

UI Plan of Work:
Instructional Design/Development Specialist
Glenn R. Wilde- UI
$47,914

Objective: *Implement technologies which support, maintain and improve the living and learning environment of the university.*

Undergirding the UI project initiatives is the broad-based need for campus-wide training and support for each of the projects described above. The UI ITS organization has "repurposed" a half-time salary to be applied to the employment of professionally-trained instructional design and development specialist to support multimedia product design and development. This specialist will work as part of the design and development team along with graphic designers and communications specialists already a part of the Center for Teaching Innovation staff. Specific responsibilities will include the following:

- Campus wide faculty and staff workshops in the design, development, delivery and assessment of technology-assisted teaching/learning materials
- Training and support for the software and hardware utilized in the development and delivery of technology based courses
- Direct assistance to faculty in the design of computer-assisted course materials for the projects described above
- Support for on-going web design assistance for courses/programs
- Project management/oversight and assessment for the SBOE projects.

Research into technology-assisted and distance-learning program shows that "one way to ensure high-

quality cost-effective technology-based teaching and learning is through project management (A. W. Bates, 2000). The UI strategy is to develop a team approach. Principal Investigators and the University administration have recognized that instructional design, graphics, and support is needed for all the projects. Four guides for quality are: *content, media production, instructional design, and delivery support.* The ID specialist will lead these support efforts. Thus, the University of Idaho seeks funding to support the ID position for two years while the administration builds the funding for the position through its internal budget processes.

FY 2002 IDAHO TECHNOLOGY INCENTIVE GRANT PROGRAM FUNDED PROJECTS

The Idaho Technology Incentive Grant Program focuses on projects that advance the goals and objectives stated in the State Board of Education's 2000-2005 Statewide Strategic Plan. **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.

Supporting Student Success

Andrew Hanson, LCSC
$115,080
Continuation

Many colleges must grapple with the difficulty of helping under-prepared students succeed. Successfully retaining these at-risk students presents unique challenges ranging from offering remedial courses and tutoring to implementing early warning systems and intrusive advising. Students who enter college with provisional or conditional admission status because of low scores on standardized. GED, and/or placement tests, and/or may have a GPA of 2.0 or below are most at risk for dropping out of college, defaulting on financial aid packages, and academic failure. This proposal reports on work accomplished during Year I of the Supporting Student Success project and details activities for Year 2.

Improving Distance Education Through Continuous Faculty and Course Improvement

Rita Morris, LCSC
$73,380

Faculty who teach with technology cope with a double burden. First, like all faculty, they must stay current in their content area. In addition, however, faculty using technology must keep up with the rapidly morphing technological environment. As colleges grapple with the challenges of supporting faculty whose teaching is mediated in by technology, they must also address the highly competitive market conditions surrounding online instruction as well as the accreditation and financial aid standards that apply to these learning experiences. In addition, they must support faculty challenged to rethink pedagogy as they apply these new tools to the learning environment. Assessment and ongoing monitoring are essential to creating and sustaining high quality learning experience for students.

Finally, all these efforts must be guided by institutional and state long-term planning. Currently, Lewis-Clark State College is completing a major strategic planning process. This strategic plan will guide the ways in which the college will deliver high- quality accessible education for the next decade as well as how we envision integrating technology into this environment. We propose to create a faculty professional development program which will focus on assisting faculty in finding solutions to creating and maintaining current technology-mediated courses.

CoreOnline@BoiseState: The Graduated Development Model for Faculty Training and Technology-Enhanced Instruction

Ben Hambelton, BSU
$564,000
Continuation

This proposal is a renewal application to refine the original multi-year grant, which is aimed at systematically increasing the number of faculty with the skills to infuse technology into the curriculum and to enhance access and quality through the collaborative development of online alternatives to traditional, campus-based core courses. The initial year has verified the value of the proposed approach of using an innovative process of team development and implementation over three semesters, an approach that allows faculty to incrementally gain experience and expertise in online instructional tools. In the first year, the project is providing training and experience in technology integration to 28 faculty in the first cohort; additionally, the project is developing 10 online versions of core courses using the graduated development model proposed in the original grant. A second cohort has been selected and is either receiving their initial training this spring or will receive it during the Summer Instructional Technology Institute in May. This application seeks funding to continue the process with all three proposed cohorts, with slight modifications in the original objectives and budget based on the first-year experiences.

Enhancing Understanding of the Management of Team Processes, Culture-

Building, & Team Decision-Making Processes
Robert Brown, ISU
$38,214

This project will provide team-based consulting/counseling to student groups taking certain qualifying upper-level business courses. Rationale for this project is to provide students with important skills needed to enhance chances of future career success. As a secondary purpose, the same services will be offered to Idaho businesses undergoing organizational change.

Objectives of the project are to enhance student team members' skill in the management of team processes; to increase student team effectiveness, group cohesion, and member satisfaction; to increase faculty productivity in delivering quality education; to increase access to ISU's educational programs; and to help Idaho businesses undergoing organizational change. Each of these objectives is consistent with SBOE and ITIGP goals.

Instructional Technology Resource Center (TRC): Course Design and Production
Terry Lay, ISU
$53,666

This proposal describes the second and third years of a strategic, three-year effort, begun in June 2000, to expand the Instructional Technology Resource Center (ITRC) at Idaho State University. First-year Technology Incentive Grant funding provided for the equipment and the staffing to begin this expansion as well as support for a vigorous faculty internship program. Funding for the second and third years, with significant matching contributions from ISU, will continue the faculty internship and production lab staffing support. The Center has completed several "course-level" products during the first year and has a long and growing list of work currently in progress. Web and web-assisted courses at ISU have more than doubled over the past year and much of this growth is facilitated by the expanded capabilities of the ITRC. With continued support, the ITRC expects to be in an excellent position to provide for the increasing needs of the ISU faculty.

Providing Access to Educational Intrepreting Didactic Courses Through Web CT 3.1
Thomas Longhurst, ISU
$43,153

The Idaho State University's (ISU's) new Educational Interpreting (EDINTERP) B.S. degree program is made up of both didactic and skills courses. To more efficiently and effectively offer the EDINTERP program in the future at the ISU-Boise Center for students in the Treasure Valley and at the ISU-Twin Falls Resident Center for students in the Magic Valley, as well as in Pocatello, ISU needs to provide the didactic courses (21 semester credits/year) through distance learning technology, heavily supplemented by WebCT 3.1.

To accomplish the goal and objectives of the proposed project, the plan of operation would require that new syllabi, course content, quizzes and surveys be developed. The print and electronic file content of the courses would need to be converted to Portable Document Format (PDF) using Adobe Acrobat 4.0. These files would then be imported to WebCT 3.1 so the courses could be offered in Boise, Twin Falls and Pocatello as Web supplemented distance-learning courses starting in Spring and Fall semesters of 2002.

Innovative Use of Technology to Enhance Inquiry-Based Learning in Lower Division Chemistry Courses
Lenore Hoyt McAlexander, ISU
$61,650

The Chemistry department was recently awarded a grant from the National Science Foundation (NSF) for the purchase of a new Varian 300 MHz Nuclear Magnetic Resonance (NMR) spectrometer. We plan to integrate use of this instrument into 100-level undergraduate chemistry courses and to increase its use in 300-level courses, in order to enhance student learning, technological literacy, and preparation for careers in chemistry and health professions. Before the acquisition of this spectrometer, NMR spectrometry was introduced superficially to 200 students/year in Organic Chemistry (a 300-level course), but only a handful of students enrolled in undergraduate research had an opportunity to use the instrument itself. The proposed project will introduce the theory of NMR spectrometry earlier, into General Chemistry (a 100-level course), by allowing students to work on simulated spectra, and will allow Organic Chemistry students to use the instrument more efficiently to obtain and process spectra.

Utilizing SmartBoards to Enhance Technology Integration in University Classrooms

Dorothy Sammons, ISU
$152,275

This project will place SMARTBoards into classrooms at Idaho State University, to train faculty in using and integrating SMARTBoards into their everyday teaching practice, and to assess the success of SMARTBoard integration through evaluation of faculty and student attitudes and use. The purpose of this project is to facilitate the integration of technology into higher education curricula, to enhance faculty productivity, to amplify the rate and quality of student learning, and to increase classroom access to educational programs. We propose to place at least two SMARTBoards in each College. One SMARTBoard will be placed in a traditional classroom while the second will be placed in a smaller, seminar room. The University will commit funds for a graduate assistant and other project costs, and the Colleges will provide a Zip drive for each SMARTBoard.

This project will encourage faculty development of original on-line and electronic material for the classroom. With a delivery medium such as the SMARTBoards, faculty will be more motivated to create their own applications, including web courses, original digital graphics and movies, electronic presentations, and CD-ROMs.

Wireless Keypad Systems for Interactive Learning in Large Lecture Classes

Steven Shropshire, ISU
$49,839

The Department of Physics at ISU has purchased two remote keypad systems and associated software for use in introductory physics classes to implement interactive learning. With these systems, large introductory physics classes with enrollments over 30 students will be altered in presentation to incorporate interactive learning. Instructors will periodically pause for in-class assessment. Questions will be projected onto a screen with the use of a laptop computer and the system software. Students will use remote keypads to respond to the questions. The instructor can project a summary of the responses, call on students to justify responses, and encourage class discussion. Pre- and post-testing surrounding class discussion or group discussion will be encouraged.

Implementation of this project will enhance the rate and quality of student learning, and may even improve student retention in introductory physics classes. This project will also integrate new technologies and teaching methodologies into the curriculum. The success of the project will be evaluated through testing and surveys of students, monitoring of attendance and retention, and through faculty surveys.

Restructring MATH 107 at ISU

Dennis Stowe, ISU
$167,116

This proposal requests funds to restructure the delivery of MATH 107 (Intermediate Algebra) at Idaho State University (ISU). Funding requested totals $167,116 for FY 2001-2002 and $351,991 over the three-year life of the project. The objectives of this project are to:

1. improve student performance in MATH 107 through the integration of technology,
2. reduce average time for attaining MATH 107 competency,
3. reduce MATH 107 staffing demands, and
4. improve the effectiveness of algebra skills assessment, placement, and remediation through a unified computer-based program.

Development of a Web Based Chemistry 101 Course

Tom Bitterwolf, UI
$50,000

This proposal seeks funding for the development of a web version of Chem 101, Introduction to Chemistry, which serves as a core science course as well as a required course in a great many majors in the applied life sciences from agriculture to forestry. Chem 101 is an ideal test ground for both a dual enrollment course, and a web science course as it has no prerequisites and assumes only basic algebra skills and a year of high school chemistry.

As currently envisioned this project will develop a series of tutorial modules that will be phased in to supplant portions of the lecture class as it is now delivered. We anticipate that it will take two to three years to completely transition from the present full lecture format to a full web format depending upon the speed with which tutorial modules can be developed, tested and implemented. Once the course has been fully converted to a web version, and once we have fully studied strategies for dealing with the laboratory component of the course, we will offer the course as a dual enrollment option. Significantly, many of the modules developed for Chem 101 may be used in Chem 111 and Chem 050 with the goal of eventually converting those courses to a web format.

Faculty Development
David Cillay, UI
$17,015

UI Strategic Plan: Undergraduate/Graduate Education

- Train and support faculty in more effective use of instructional technologies
- Provide academic computing, instructional design, and technical support to assist faculty

Under the Center for Teaching Innovation, workshops and faculty development programs will be developed to support the professional development opportunities for faculty, including a faculty mentor program, student assistants, assessment of educational practices. The funds will be utilized to "magnify" the constructive role of instructional design and development to enable technology-based teaching and learning at the University of Idaho.

Development of an Interdisciplinary Program in Information Visualization
Jill Dacey, UI
$49,973

The Department of Art at the University of Idaho proposes to develop a program of capstone courses in Information Visualization. The proposed program will bring together interdisciplinary teams of faculty, staff, and students to develop and produce visualization systems, methodologies, and examples for the resolution of problems where visual demonstration of concepts and materials enhances, even permits, understanding. Work generated will be used to enhance the teaching and research missions of the university. The program will consist of a capstone senior/graduate level course each of two semesters (2001-2002 academic year).

Moving Beyond the Classroom: A Web-Based Certificate in Evaluating Environmental Contamination
Maxine Dakins, UI
$49,901

This project will provide a Certificate in Evaluating Environmental Contamination through the Internet delivery of three upper division undergraduate and graduate level courses in environmental toxicology, risk assessment, and environmental sampling design and data analysis. The courses will be applicable to University of Idaho degrees in Environmental Science as well as to other degree programs and to professional development. The proposed offerings build upon two current SBOE ITIG grants supporting degree completion at the undergraduate and graduate levels. Elements of faculty development and program assessment are included. Once course delivery is established, the program is designed to be financially self-sustaining.

Development of Three CD/DVD - Based Short Courses in Internet Security
Deborah Frinke, UI
$49,978

This proposal describes an SBOE/Technology Incentive grant request to develop three CD/DVD-based short courses in Network Security (e.g., intrusion detection, host site defense, remote site defense) that will form the foundation of a fully asynchronous Certificate program in Network Security, and organize a plan for development of an extensive series of such modules. Certificate completion will either lead to more advanced graduate degrees or serve as an indication of expertise for those who do not choose to pursue them. The initial modules will be available for enrollment beginning Fall 2001. This proposal effort enhances an identified focal area of the University of Idaho (information assurance/computer security). The development will build on the PI's continuing work in Secure and Dependable Computing Systems to enhance opportunities for providing education in the critical area of network and computer security, and development would be administered and supported by her through the Center for Secure and Dependable Software. Production support will be provided through Engineering Outreach; such support will include Web site development, CD/DVD developing, marketing, and distribution. Academic support of the certificate will be provided by the Department of Computer Science. These modules will also be used as proof-of-concepts in obtaining additional external funding for the full series of modules. This module-based delivery system has the potential to greatly increase the accessibility of graduate-level education in computer security to technology professionals; further, such education has been identified as of critical national importance.

Development of Two Web-based Introductory Environmental Science Classes (Env Sci 101, 200)
Bob Mahler, UI
$47,921

This project will provide two introductory level environmental science courses via the web. One course is a core science course at UI; both courses are applicable to the BS degree in EnvS. Two faculty members, from Plant, Soil and Entomological Sciences and the International Programs Office, will develop the proposed courses with the help of graduate students. The project will enhance productivity on campus by providing an alternative method of course delivery for EnvS 101 and EnvS 200. Once off-campus delivery is established, this program is designed to be self-sustaining financially, using a funding model for off-campus programs approved by the UI Administration. The program is unique in regional higher education and will provide a quality program for distance education in Idaho and throughout the country, and perhaps the world.

Distance Education Program for Family and Consumer Sciences Teacher Certification
Mary Pickard, UI
$49,989

UI Strategic Plan—Outreach

Goal 2: *Deliver high-quality undergraduate, graduate, and continuing professional education curricula and courses to distance learners*

- Expand in-service and professional education
- Develop and implement innovative distance learning curricula in selected program areas

The School of Family and Consumer Sciences (FCS) has identified teacher certification as a priority need—one that complements the role and mission of the University of Idaho. FCS will develop four (4) web-based courses to support content areas for certification. FCS will engage in active design of these courses for asynchronous delivery in partnership with the Division of Professional-Technical Education that will certify the teachers completing the program of study. The project meets both SBOE and UI goals: (1) enhancement of the rate and quality of student learning; (2) enhanced faculty productivity; and (3) increased access to educational programs. A strong assessment component has been designed into the project as a part of the certification program.

Developing Business 100 as a Web-Based Course
Robert Stone, UI
$49,990

UI Strategic Plan: Undergraduate Education

Goal 2: *Continuously improve the quality of undergraduate programs*

- Strengthen the quality of undergraduate education
- Support enhanced learning & innovative teaching
- Identify learning outcomes and apply assessment findings to strengthen academic programs
- Increase access to business courses
- Train and support faculty in more effective use of instructional technologies
- Identify opportunities for appropriate uses of technology in departmental curriculum

This project demonstrates several objectives that are integrated in the design, development and implementation of web-based business courses—beginning with Business 100 an introductory professional course in business. Faculty in the College of Business are committed to extending access to a well-designed web-based course to campus and nontraditional, off-campus learners to replace the current "seat-time" course. The objective of the course is to introduce learners to career opportunities in business. The course is a large-enrollment course offered each semester, and will complement the design of the new Albertson Business and Economics building to accommodate and encourage technology-based teaching and learning. Four objectives are built into this project: (1) increase access to CBE course; (2) increase faculty productivity and reduce seat time; (3) improve the rate and quality of student learning; and (4) integrate technology into teaching/learning environments.

UI Two Year Project
Kang-tsung (Karl) Chang
$50,000
Continuation

Project #1
GIS Certificate Program and Integration of Spatial Technologies into GIS Courses

UI *Strategic Plan—Undergraduate Education*

Goal 1: *Enhance the University of Idaho's undergraduate experience, and make the university a residential campus of choice in Idaho and the West*

- Objective 2: Continuously improve the quality of undergraduate programs
- Objective 8: Implement technologies which support, maintain and improve the living and learning environment

UI *Strategic Plan—Graduate Education and Research*

Goal 2: Be *a globally competitive center for high-quality graduate, professional and research programs*

- Objective 1: Ensure that each graduate and professional degree is academically strong and enhance global prominence in selected areas
- Objective 3: Increase the university's contribution to disciplinary knowledge, consistent with that of a competitive Carnegie Research University I, and to the application of knowledge, consistent with our land-grant university mission.

Geographic Information Systems (GIS), remote sensing and Global Positioning Systems (GPS) provide a powerful suite of spatial technologies to advance teaching/learning and research at the University of Idaho. The Department of Geography project will accomplish three objectives related to the strategic plan: (1) upgrading of the GIS laboratory that has direct impact on the quality of education in seven (7) GIS and remote sensing related courses. (2) redesign of materials for integration into the instructional strategies for courses in Geography; and (3) development of a graduate certificate program in GIS designed for recent graduates and professionals.

There are projected positive outcomes, including increased student enrollments, the development of an advanced certificate program, improved education of students by providing hands-on access to key tools and resources in an emerging employment market, and increased national/international recognition of the academic program at the University of Idaho. Funding will be provided for the upgrade of the labs by the College of Mines and Earth Resources and the Department of Geography. SBOE funds will be used for the continued development of computer-assisted modules and for the development of the advanced GIS certificate program.

UI Two Year Project
Margrit vonBraun
$50,372
Continuation

Project #2
Statewide Graduate Environmental Science Courses

UI *Strategic Plan—Graduate Education and Research*

Goal 2: *Be a globally competitive center for high-quality graduate, professional and research programs*

- Objective 1: Ensure that each graduate and professional degree program is academically strong and enhance global prominence in selected areas
- Objective 2: Optimize the quality, size and diversity of the graduate student enrollment

UI *Strategic Plan—Outreach*

Goal 3: *Expand the capacity and delivery of outreach programs and services in keeping with the University of Idaho's land-grant mission*

- Deliver high-quality undergraduate, graduate and continuing professional education and courses to distance learners
- Link the university's education and research programs to Idaho's economic and social needs and the well-being of its citizens

The UI will provide continuing professional education (CPE) and graduate courses leading to an MS degree in Environmental Science to nontraditional students in Idaho over a two-year period. The courses will be designed and developed for interactive delivery, utilizing compressed video and web-assisted learning. Included in the tools for integration are multimedia video servers, web delivery, and online library and information resources. A team comprised of faculty, instructional and graphic designers, distance education librarians, and other support services will design and develop the courses and course materials. This constitutes one of the most effective forms of faculty development in which instructional strategies can be matched with intellectual content for deciding the most effective and efficient method for delivery.

The most significant outcomes will be the enhanced delivery of a set of integrated courses leading to a MS in Environmental Science. In addition, the materials will be used for the on-campus/off-campus delivery, enhancing the quality of the resources and the tools for undergraduate and graduate students. SBOE funds will be used for course design and development. Matching funds are being allocated from generated fees.

UI Two Year Project
Alton Campbell
$50,000
Continuation

Project #3
Design and Development of Four Technology-Enhanced Graduate Courses in Natural Resources

UI *Strategic Plan—Graduate Education and Research*

Goal 2: *Be a globally competitive center for high-quality graduate, professional and research programs*

- Objective 1: Ensure that each graduate and professional degree program is academically strong and enhance global prominence in selected areas
- Objective 2: Optimize the quality, size and diversity of the graduate student enrollment

UI *Strategic Plan—Outreach*

Goal 3: *Expand the capacity and delivery of outreach programs and services in keeping with the University of Idaho's land-grant mission*

- Deliver high-quality undergraduate, graduate and continuing professional education and courses to distance learners

- **Link the university's education and research programs to Idaho's economic and social needs and the well-being of its citizens**

The nationally ranked UI College of Natural Resources will design and develop four courses for distributed delivery, leading to a Master of Natural Resources (MNR) degree and/or a Certificate program in Restoration Ecology. Project faculty, working within a team comprised of instructional and graphic designers, and other technical support staff will design and develop materials for delivery utilizing compressed video systems integrated with web-based multimedia materials. This represents a new instructional direction for the College of Natural Resources faculty who have generally delivered courses in face-to-face environments. Web enhanced learning will develop critical thinking skills and threaded discussion groups. The faculty will develop a number of multimedia case studies, illustrating in vide and graphics formats restoration theory, applications and issues.

The project will be designed around the UI "software stack" that provides an online portal—campus pipeline—to allow connection to the administrative **systems (course management tools, communications tools)** and academic tools (interactive web pages, multimedia servers, assessment and testing instruments). These design elements will be coordinated with the Center for Teaching Innovation/Outreach and Technology. The outcomes will be a high-quality series of courses that will be delivered to students throughout Idaho and potentially the world. Matched funding will be derived from fees and the College of Natural Resources.

UI Two Year Project
David Cillay
$50,000
Continuation

Project #4 Instructional Design/Development Specialist

UI *Strategic Plan—Technology Objective*
Objective 8: ***Implement technologies, which support, maintain and improve the living and learning environment of the university.***

Undergirding the UI project initiatives is the broad-based need for campus-wide training and support for each of the projects described above. The UI Information Technology Services organization has "*re*purposed" a half-time salary to be applied to the employment of professionally-trained instructional design and development specialist to support multimedia product design and development. This specialist will work as part of the design and development team along with graphic designers and communications specialists already a part of the Center for Teaching Innovation staff. Specific responsibilities will include the following:

- Campus wide faculty and staff workshops in the design, development, delivery and assessment of technology-assisted teaching/learning materials
- Training and support for the software and hardware utilized in the development and delivery of technology based courses
- Direct assistance to faculty in the design of computer-assisted course materials for the projects described above
- Support for on-going web design assistance for courses/programs
- Project management/oversight and assessment for the SBOE projects.

Research into technology-assisted and distance-

learning program shows that "one way to ensure high-quality cost-effective technology-based teaching and learning is through project management (A. W. Bates, 2000). The UI strategy is to develop a team approach. Principal Investigators and the University administration have recognized that instructional design, graphics, and support is needed for all the projects. Four guides for quality are: *content, media production, instructional design, and delivery support.* The ID specialist will lead these support efforts. Thus, the University of Idaho seeks funding to support the ID position for two years while the administration builds the funding for the position through its internal budget processes.

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