

**INSTRUCTION, RESEARCH, AND STUDENT AFFAIRS  
AUGUST 10-11, 2011**

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<b>TAB</b>	<b>DESCRIPTION</b>	<b>ACTION</b>
<b>1</b>	<b>EXPERIMENTAL PROGRAM TO STIMULATE COMPETITIVE RESEARCH (EPSCoR) ANNUAL SUMMARY REPORT</b>	Information Item
<b>2</b>	<b>BOISE STATE UNIVERSITY – APPROVAL OF FULL PROPOSAL: Ed.D., EDUCATIONAL TECHNOLOGY</b>	Motion to Approve
<b>3</b>	<b>FIRST READING, PROPOSED AMENDMENTS TO BOARD POLICY III.W. HIGHER EDUCATION RESEARCH</b>	Motion to Approve
<b>4</b>	<b>SECOND READING, PROPOSED AMENDMENTS TO BOARD POLICY III.V.3., ASSOCIATE OF APPLIED SCIENCE DEGREE</b>	Motion to Approve
<b>5</b>	<b>SECOND READING, PROPOSED AMENDMENTS TO BOARD POLICY III.M., ACCREDITATION</b>	Motion to Approve

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**AUGUST 11, 2011**

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**SUBJECT**

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

**REFERENCE**

June 17, 2010

Provided Annual Report

**APPLICABLE STATUTE, RULE, OR POLICY**

Idaho State Board of Education Governing Policies & Procedures, Section III.W. Higher Education Research

**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 Idaho EPSCoR Project Director are located at the University of Idaho. Partner institutions are Boise State University and Idaho State University.

Consistent with Board Policy III.W.2. d., EPSCoR has prepared an annual report regarding current EPSCoR activities that details all projects by federal agency source, including reports of project progress from associated external Project Advisory Board (PAB). Mr. Rick Schumaker is the Project Administrator for Idaho EPSCoR and will be providing this summary report to the Board.

**ATTACHMENTS**

Attachment 1 – Annual Report Summary

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**BOARD ACTION**

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

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IDAHO NSF EPSCoR  
**RESEARCH INFRASTRUCTURE IMPROVEMENT (RII Track-1) AWARD**  
(September 1, 2010 to August 31, 2011)  
THIRD ANNUAL REPORT SUMMARY

**A. Vision, Mission, and Goals**

This RII project is designed to position Idaho's academic research institutions to become regional, national, and international leaders in basic research and education related to the effects of climate change on water resources and the impacts on ecological, human, and economic systems. Idaho's RII involves significant collaboration of academic leaders at the University of Idaho (UI), Boise State University (BSU), and Idaho State University (ISU) to address current barriers to competitiveness. It targets Ecosystem Health, an area of major significance to Idaho as previously identified by the Governor's Science and Technology Council. The project is guided by the Idaho EPSCoR Committee (now reporting to the Idaho State Board of Education) and is led by the State Project Director, Dr. Peter Goodwin (Principal Investigator), an experienced administrator and Director of the UI Center for Ecohydraulics Research. Dr. Von Walden (co-Principal Investigator) has responsibility for scientific leadership and integration of research activities. The RII project adheres to a Strategic Plan, *Innovation for Idaho*, developed in the fall of 2009.

Idaho EPSCoR has three main goals: 1) provide strategic programs and opportunities for EPSCoR participants that stimulate sustainable improvements in their R&D capacity, 2) stimulate advances in science and engineering capabilities in Idaho for discovery, innovation, and overall knowledge-based prosperity, and 3) increase access to enhance science and mathematics learning opportunities for all students. To achieve these goals within the science theme, *Water Resources in a Changing Climate*, we focus on: 1) building partnerships and collaborations in climate change research, 2) filling a critical niche in hydrology by understanding the nexus between surface flow and groundwater, and 3) supporting complementary field studies on a highly managed river system (Snake River Plain) and a relatively unmanaged system (Salmon River Basin). Our investment strategy is to provide new faculty positions; startup packages and mentoring plans for early-career faculty; modern instrumentation; improved cyberinfrastructure capabilities; enhanced integrative, interdisciplinary, multi-institutional research; undergraduate and graduate students mentoring in research; postdoctoral mentoring and development; interdisciplinary graduate programs; and increased STEM activities with emphasis on engaging under-represented minorities in Idaho.

**B. Intellectual Merit**

This RII has created a cohesive team of researchers in climate change and water resources and interactions with ecological and human systems. Research on climate impacts is focusing on: the two-way coupling between hydrology, ecology, and economics and policy; improved

modeling of surface and groundwater connections in managed river systems; utilizing long-term datasets of ecological change in pristine river systems; understanding economic ramifications of increased climate variability; and collection and management of disparate data types and large datasets from multiple disciplines through cyberinfrastructure. Research in adaptation strategies focuses on understanding how climate change impacts may be mitigated through effective utilization of groundwater and better long-term management of water in an area that serves over half the population of Idaho.

### **Key Accomplishments**

#### *Intellectual Capacity and Collaborations*

- Idaho has now filled all 10 of the planned new faculty positions in the following research areas: Econometrics, Climatology, Water resources engineering (reservoirs), Regional science and climate change impacts, Water resources engineering (drought/planning), Soil microbial ecology, Ecosystem and soil science, Hydrology, Ecosystem services, and Climate change impacts/fire. Six of the 10 new hires are women, two at each university.
- The Idaho EPSCoR Office is working with the University of Idaho and Idaho State University in negotiating two additional permanent faculty hires from the strong pool of applicants in two recent faculty searches. This represents an outstanding opportunity to leverage NSF and institutional investments, and demonstrates the strong commitment of the universities to the EPSCoR Theme.
- Overall, the RII program involved more than 35 research assistants and 15 postdoctoral fellows in the third year of the award. In addition, 83 undergraduates (49% female and 26% underrepresented minorities) are involved in research activities.
- EPSCoR faculty produced 32 publications during the third year, 13 primarily from EPSCoR support. Participants submitted 43 manuscripts for publication, 24 that acknowledge primary NSF EPSCoR support. RII faculty also was involved in submitting 55 proposals in Year 3; 23 grants were awarded during the same period, for a total of \$26.6 M.
- The Idaho research team is now recognized as a valuable partner in regional climate change research. Our team is helping to lead several regional initiatives: 1) the USGS Regional Climate Science Center for the Pacific Northwest (with CIG at U. Washington and Oregon Climate Change Research (OCCRI) at Oregon State University); 2) a large project led by the UI for a USDA Coordinated Agriculture Project (CAP) that includes scientists from Idaho, Oregon, and Washington; and 3) a NOAA RISA grant awarded to the OCCRI.
- Development of the Western Tri-State Consortium of Idaho, Nevada, and New Mexico was enhanced through a Track 2 RII project. Tri-State partners ratified the ISO 19115-2 metadata standard as the single standard that all others will be mapped to. The data replication process will be enabled through the ISO standard.
- We continue to participate with the DataONE project by attending their annual conference, participating in their Sustainability and Governance Working Group, the DataONE User Group (DUG), and attending other meetings. The Northwest Knowledge Network (NKN), an EPSCoR-catalyzed program, will become a member node for DataONE.
- Increased participation of 2-year and 4-year colleges, particularly the College of Southern Idaho, in NSF EPSCoR activities was achieved through the RII C2 project.
- Idaho EPSCoR is a co-sponsor of the 2<sup>nd</sup> Annual Pacific Northwest Climate Science Conference, which will be held at the University of Washington in September of 2011.

### Hydro-climatology

- Three experimental towers have been established with instruments to measure surface energy and mass balance. These are located in three types of land cover: 1) natural sagebrush steppe, 2) invasive cheatgrass, and 3) forested in complex terrain. The sites are heavily instrumented to measure surface meteorology, radiation fluxes, soil moisture, and sensible and latent heat fluxes. The data from the field sites are being utilized to improve hydrologic modeling on the Snake River Plain by increasing understanding of how different vegetation types utilize soil moisture and, therefore, how they affect evapotranspiration.
- A groundwater model (MODFLOW) has been connected to the Variable Infiltration Capacity (VIC) model to investigate connections between surface and groundwater under various climate change scenarios. The two-coupling between these two models provides an innovative way to investigate the connection between base flow, groundwater recharge, and soil moisture. VIC has also been coupled with the Snake River Planning Model in collaboration with the Idaho Department of Water Resources. Evaluation of exceedance probabilities of historic and future extreme events (based on climate change scenarios) are being used to investigate if the infrastructure dealing with urban flooding and storage structures (dams) is capable of dealing with changing hydrologic conditions. Analysis of historic flow records and predictors of future scenarios indicate that flood flows are occurring more frequently. Some watersheds in the Upper Snake River Plain show what was considered the 100-year peak flood flow may become as low as the 20-year flood event.
- A substantial modeling project was completed to downscale climate model output for use by EPSCoR research participants. Three different data sets were completed and represent different levels of downscaling complexity: a simple delta-T technique, a bias-corrected statistical downscaling (BCSD) method, and new innovative Multivariate Adapted Constructed Analog (MACA) recently published by J. Abatzoglou, one of our new faculty. These data sets are archived at INSIDE Idaho and available for download via the Internet.

### Ecological Change

- The Legacy Datasets of the Salmon River Basin have been compiled and digitized. Long-term data sets on invertebrates from the Salmon River Basin and periphyton from Big Creek (a tributary to the Salmon) have been archived.
- Field sites have been re-established in the Salmon River Basin to study long-term trends in ecosystem structure and function shifts. Some of these sites have been used for decades as part of the Legacy Dataset; some are new sites.
- Preliminary steps have been taken to integrate ecological research with both hydrological measurements and modeling to improve understanding of the Salmon River system.

### Economic and Policy Modeling

- A risk-based framework for integrated economic-hydrologic empirical modeling for southern Idaho has been developed. This includes investigating economically optimal distribution of water resources among the stakeholders, taking into account hydrologic interdependencies between surface and groundwater, and modeling the impacts of climate variability on water management strategies. This project was computationally-intensive, and the EPSCoR Office provided additional computer workstations and memory to complete the modeling.

- In Year 3, the Economics and Policy team has engaged with personnel at State and Federal agencies, including the Natural Resources Conservation Service and Idaho Department of Water Resources (IDWR). These relationships are mutually-beneficial. Data have been provided by State and Federal agencies to support project work.

#### Cyberinfrastructure

- Idaho EPSCoR RII participants have agreed to share data, and our data sharing policy has been updated. The policy represents a significant step forward for data management and sharing that is expected to serve as a model for multiple institutions.
- Track 1 and Track 2 funding have been leveraged to hire a CI Coordinator and a Data Manager to provide the expertise and coordination needed to achieve statewide CI goals.
- Data access and visualization tools are in use, primarily in the areas of downscaled climate model output via INSIDE Idaho, LiDAR data, and soon for hydrologic model output.
- An integrated CI web portal is under development and Phase I should be complete by the end of Year 3.
- The Idaho research community has begun a major initiative toward developing a state-wide CI Plan. This was initiated with a CI Summit meeting that resulted in a MOU for statewide CI collaboration among research universities in Idaho.
- Idaho EPSCoR and the IdahoView are collaborating to form the Idaho LiDAR consortium. The activities of this Consortium are synergistic with the activities of national initiatives including USGS CLICK and the NSF OpenTopography (SDSC) project.
- The UI provides staff to manage the data at INSIDE Idaho. INSIDE will eventually become part of the Northwest Knowledge Network (NKN), a regional CI initiative. This will provide assurance of 100% uptime for this facility. INSIDE Idaho has played a critical role in serving our downscaled climate data sets over the Internet via various transfer protocols. This has allowed us to develop a toolbox for ArcGIS that can serve climate model data directly to a desktop computer as a “projected layer”. We plan to demonstrate this capability to agencies, including the USGS, USFS, and BLM.

#### **C. Broader Impacts:**

Research data and topics are being incorporated into learning and outreach activities to achieve broader impacts. Stakeholders (state and federal agencies, Idaho Power, agriculture, etc.) benefit from interactions with RII faculty. Integration of research and education benefits graduate and undergraduate students. Participants are incorporating water resources and climate change science into educational experiences for hundreds of K-12 students and teachers. Faculty are engaged in outreach to community colleges, K-12 schools, and others programs in their communities. Outreach and diversity investments provide new, sustainable experiential learning programs for secondary students and teachers in an outdoor science school, e-Camp for Hispanic students, and research experiences and mentoring for Native American high school students at the UI and ISU. The long-term success of these programs will increase the number and diversity of students pursuing STEM disciplines and careers.

#### **Key Accomplishments**

- The Idaho STEM Pipeline, a website dedicated to promoting STEM learning opportunities, has grown to include more than 85 programs in Idaho. This initiative complements and is



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coordinated with the statewide i-STEM initiative led by the Idaho National Laboratory to provide training and learning materials for K-12 teachers.

- New collaborative projects through multiple, jointly sponsored Tri-State Innovation Working Groups (IWG) have developed joint proposals and/or synthesis papers involving dozens of faculty within the Consortium.
- Engagement of the community colleges throughout Idaho continued to expand this year. The College of Southern Idaho (CSI) is leading a STEM education project to connect K-12 teachers with technology and training through the CSI and EPSCoR collaboration.
- Broadening participation. During the third year of this RII award, self-reported demographic data for 210 RII participants at all university levels (faculty, staff, and students) show 17% minority participation, up from 14% in Year 2. Participation in outreach programs was particularly strong.
  - The McCall Outdoor Science School served 284 junior and senior high students in science camps, over 100 more than in Year 2. Fifty-seven percent (57%) were female and 27% were underrepresented minorities, also an increase.
  - The MOSS Teacher Institute directly served 41 teachers this year. This will reach an estimated 4,000 students via teacher training.
  - The one-day e-Day served 60 students. Participation of minority students increased from 66% (2010) to 70% in 2011; 65% were female.
  - During e-Camp (Grades 8-9; June 2011) students participated in hands-on activities involving cooperative learning, critical thinking, and problem solving. The camp was attended by 52 students (50% female and 32% underrepresented minority students, including 16 Hispanic students).
  - Helping Orient Indian Students and Teachers (HOIST), a 5-week, summer college preparatory program at the UI trained 17 Native high school students in 2011. The EPSCoR-supported Native American student internship program at ISU provided an additional 9 Native students (70% female) with research training.

The external Project Advisory Board (PAB) met on August 31-Sept. 1, 2010 in Idaho to review the activities and progress of the second year. In addition, the formative external evaluation prepared by Rose Shaw has been used by the project management team to guide management decisions. This year the project management team has continued to pursue greater integration of project activities, and focus on CI as a means to facilitate research competitiveness and accelerate knowledge discovery as described in this report.

Idaho EPSCoR Research Infrastructure Improvement (RII Track-2)  
**Cyberinfrastructure Development for the Western Consortium of  
Idaho, Nevada, and New Mexico**

(Sept. 1, 2010 – August 31, 2011)

**Second Annual Report Summary**

**Vision, Goals, and Objectives of Project**

The **vision** of the Western Consortium for Cyberinfrastructure Development is *to transform communication, climate change science, and education in our tri-state (Idaho, Nevada, New Mexico) region*. Moreover, a key outcome will be sustained partnerships among our jurisdictions that will enhance our competitiveness for research funding and enable us to better address 21<sup>st</sup>-century, grand scientific, and societal challenges.

The overarching **goal** of the Consortium's Track 2 RII is *to promote knowledge transfer to scientists, educators, students, and citizens within and beyond the Consortium by enhancing state cyberinfrastructure (CI) and to enable the community science that is required to address regional to global scientific and societal challenges related to climate change*. To meet this goal, there are three primary **objectives**:

- 1) Promote communication and collaboration by increasing connectivity and bandwidth (*Connectivity Component*);
- 2) Promote discovery by supporting community-based climate change science through enhanced interoperability between models and other software components, providing improved access to and usability of Consortium data products by adopting standards-based data management and access models, and supporting new data assimilation, analysis, and visualization capabilities (*Interoperability Component*); and
- 3) Utilize CI to integrate research and education (*Cyberlearning Component*) by: focusing on graduate student, postdoctoral researcher, and faculty development; extending science education into middle and high schools; and improving outreach to business and industry.

A team has been formed to carry out the activities tied to each of the objectives above. These components—Connectivity, Interoperability, and Cyberlearning—form the organizational structure of the project as a whole.

**Efforts and Key Accomplishments**

*Intellectual Merit*

Year 2 of this project has continued and expanded the efforts begun in Year 1. The key accomplishments summarized below and described more fully in the body of this report will enable researchers from many disciplines in each of the jurisdictions to more effectively share data and models and to integrate their products into other national and international systems

and projects (such as DataOne, Geospatial OneStop, NBII, and GEOSS). Improved connectivity will facilitate and enable data-intensive research, collaborative development, distributed experiments, grid-based data analysis, high performance networking, social networking and cyber-enabled learning. Improvements in connectivity and enhanced interoperability and accessibility of data and models will enable the Consortium to realize its community science objectives and transform the way the three states do research.

#### ***Broader Impacts***

From its inception, the proposed CI investments in the Consortium were designed to achieve broad impact and to add value by leveraging existing resources and infrastructure within the institutions, jurisdictions, and regions. The Consortium has further developed its commitment to increasing the diversity of the STEM workforce through the development of a Tri-State Diversity Plan, which is being implemented in all three states. The Consortium's investment in improved connectivity benefits rural institutions and those that serve Hispanic and Native American students and faculty. The project will make high-quality environmental data, information, and models available for STEM education and outreach, including classroom and laboratory use and student research. The Consortium's Cyberlearning activities will have long-lasting effects by training the next generation of scientists and targeting a range of geographic and cultural populations. Furthermore, we are preparing the future scientific workforce with better-developed quantitative reasoning, data analysis, and modeling skills. Cyberlearning activities support educational activities at all educational levels, including the development and dissemination of educational materials for middle school and high school students with large numbers of Hispanic and Native American students. New activities in Year 2 have broadened the project's impact to include rural, small business entrepreneurs.

The Western Tri-State Consortium has organized project activities into three components based on its three primary objectives: Connectivity, Data and Model Interoperability, and Cyberlearning. A summary of the project's efforts and key accomplishments in *research, cyberinfrastructure, and workforce development* are presented below as they align with these three components.

#### ***Connectivity***

- Upgrading connectivity to two major research stations, at Hagerman and Kimberly, Idaho.
- Upgraded networking connectivity in Nevada (at the north end) to 10GBps.
- Installation of networking and video connectivity within Nevada complete; system is in use.
- Completed installation of 20 education portals (Gateways) across New Mexico; training for usage underway.

#### ***Data and Model Interoperability***

- Continued development of each state's data portal with shared interoperability standards; data portals in New Mexico and Idaho are operational and Nevada is in internal testing.
- Identified a wide range of open interoperability standards for CI development for data access and visualization, metadata and catalog services and connectivity with national programs and networks.
- Developed a model for data synchronization that is mediated through use of ISO 19115-2 metadata; an initial test of the model is planned for completion by the end of the project year.

- Collaborated with numerous CI programs/networks for exchange of technical information and data/metadata.
- Developed a new landscape evolution model in Matlab.
- Continued development of the Demeter framework to use web services for data exchange and model execution.
- Developed required specifications needed for developing a coupling framework for integrating the WRF model with a subset of surface models.

### **Cyberlearning**

- Provided information and funding for CI-related training for graduate students and faculty.
- Coordinated and hosted a 3-day workshop in Parallel Computing with the NCSI.
- Created a leadership team in Nevada that meets bi-weekly to direct K-12 Cyberlearning activities.
- Developed four curriculum modules to support a teacher summer science institute in Nevada.
- Collaborating organization, McCall Outdoor Science School, developed a cyberlearning website and is working to enhance site content and HIS database interface.
- Developed a program to integrate cyberlearning into STEM classes at an Idaho charter school to enable students to communicate with STEM professionals nationally.
- Funded three new Supercomputing Challenge teams and three new teams in Project GUTS (Growing Up Thinking Scientifically) in New Mexico.
- Evaluated and organized on-line resources for climate data, visualization tools and tutorials.
- Developed a web framework to allow teachers to use web-based instructional tools in their classrooms.
- With partners, provided CI-related teacher professional development.
- Initiated collaboration with FastForward NM to provide internet training to small business entrepreneurs in rural NM communities.

### **Cross-Component Accomplishments**

Efforts that focus on *diversity, outreach and communication, evaluation and assessment, and sustainability* cross each of the components and are coordinated by project leadership. Year 2 efforts and key accomplishments in these areas include:

- Created and are implementing a Tri-State Diversity Action Plan that identifies six strategies for broadening the participation of underrepresented minorities (URM) and women in STEM.
- Developed and launched a Consortium website ([www.westernconsortium.org](http://www.westernconsortium.org)).
- Held the Western Tri-State Consortium Annual meeting for 200 participants; agenda included workshops, keynote speakers, a student poster competition and 15 research and education sessions.
- Underwent a review by the External Advisory Committee.
- Hired Lisa Kohne as the new External Evaluator upon the resignation of the former external evaluator.
- Funded four tri-state Innovation Working Groups.
- Hosted a meeting of representatives of the governing councils from the three states to discuss opportunities for continuing collaborations beyond the period of this award.

*Management Structure*

The project *management structure* is designed to encourage interaction among the three states and the various components; a representation of the structure is on page 29. The State Directors, PI, Co-PIs, Project Administrators, and Education, Outreach, and Diversity Coordinators form a Management Team. Each Component Team has an overall component lead supported by state leads and team members from each of the three states. An External Evaluator and an External Advisory Committee provide evaluation and assessment to the project management. Each component team has monthly meetings to coordinate activities and chart progress towards objectives. Finally, to encourage effective project management, the PI, Co-PIs and Component Leads hold monthly Leadership meetings. Most meetings have occurred online via Webex or GotoMeeting.

*Response to External Advisory Board Report*

The Consortium's Track 2 project has a seven member External Advisory Committee (EAC) consisting of internationally and nationally recognized experts in the project's focus areas. The EAC met with the project's leadership and team members on February 18, 2011 at the Center for Advanced Energy Studies in Idaho Falls, ID. Based on presentations made by the project team, the EAC reviewed progress toward achieving outcomes of the project, made constructive suggestions for improving and/or changing the direction of the work underway, and provided suggestions for collaborations within and outside the Tri-state region, as well as suggestions for funding opportunities appropriate to our project focus. The EAC summarized their comments and recommendations in a report to the Consortium. The project team responded to each recommendation with strategies on how we will incorporate the recommendations into the project. The 2011 EAC report, with project team responses embedded, as well as the meeting agenda and materials can be found online at:

<http://www.westernconsortium.org/DrawOnePage.aspx?PageID=194>.

*Response to Year One Evaluation Report*

The project's Year One external evaluator, Dr. Rose Shaw, submitted the Year One Evaluation Report to the project leadership. Component leads and the Management Team reviewed the recommendations in the report and made minor adjustments to some program activities, but these adjustments have not resulted in any major changes in the long-term project goals, objectives and desired outcomes. After completion of the Year One Evaluation Report, Dr. Shaw withdrew from the project. Dr. Lisa Kohne of SmartStart Educational Consulting Services has been hired as the external evaluator for the remainder of the award period. This change was communicated to the Track 2 NSF EPSCoR Program Officer.

**Idaho EPSCoR Research Infrastructure Improvement (RII)  
Inter and Intra-Campus Connectivity (C2)**

(Sept. 1, 2010 – August 31, 2011)

**First Annual Report Summary**

*Intellectual Merit:*

Idaho EPSCoR planning efforts within the State and the western region, coupled with past NSF EPSCoR RII investments, have enhanced research opportunities by improving connectivity, increasing access to high performance computing capacity, and adding visualization and collaboration technologies.

This RII C2 project has specifically developed additional capacity for research and research based education by providing improved cyber-connectivity and broadband access at 2-year, 4-year and rural institutions in Idaho. Through partnerships with the Idaho Regional Optical Network (IRON), more institutions now have high-speed IP bandwidth (10 Mbps to 10 Gbps) and L2VPPN connectivity to the commodity internet, Internet2, the National Lambda Rail (NLR). In addition, increased institutional participation in IRON within the state now provides more high-speed connections between education and research facilities within the State.

NSF EPSCoR C2 funding is further helping Idaho to 1) develop a well organized structure to facilitate access to and sharing of data, and 2) increase connections to college and K-12 institutions to facilitate a more integrated approach to engagement of a diverse science and engineering audience in research and research based education. New C2 partnerships will enable more direct video collaboration and distance learning capabilities between Idaho's universities and the partner colleges, and, as a result of the Idaho Education Network (IEN), between all higher-education institutions and every high school in the State.

Idaho EPSCoR is specifically engaging researchers and educators across Idaho in the main RII research theme *of better understanding the effect of climate change on water resources, the environment, and the economy*. The development of a new data portal that integrates RII Track 1, Track 2, and C2 information will soon significantly improve access to data and resources that can be used in research and research based education. Statewide strategic CI planning is also underway, due in large part to EPSCoR leadership and investments that have stimulated the process.

*Broader Impacts:*

The C2 investments are improving cyberinfrastructure at a broad range of institutions, including three of Idaho's community and undergraduate colleges. The project has significantly increased awareness at these colleges of NSF EPSCoR programs and of the importance and opportunity STEM initiatives provide to our institutions and students. RII C2 has opened the door for more communication among institutions and for meaningful collaborations to grow.

IRON is the enabling platform, adding bandwidth that will support education delivery, research, and economic development in Idaho. The Idaho Education Network (IEN) is providing high-speed connections to Idaho's public schools at no cost to the NSF EPSCoR grants. The first phase of IEN has already connected 78 school districts (140 high schools / over 67,000

students); there are 14 additional districts (23 schools) to be completed soon. Through IEN, all schools and libraries will be enabled to incorporate technologies to enhance the teaching and learning of Idaho's students. As a result, more students will be prepared for higher education, technical school, or employment.

The RII C2 has broadening institutional participation in NSF and EPSCoR activities by providing:

- NIC/UI -- Access to high speed internet and enhanced videoconferencing capabilities and increased connection between institutions in North Idaho.
- LCSC – access to high-speed internet and state-of-the-art video capabilities for improved distance education delivery.
- CSI – significantly improved local area desktop network and wireless internet speeds.
- ISU – improved network design and access to IRON for improved inter and intra-state connectivity

In addition, new CI expertise is being added to the faculty at University of Idaho as a result of the C2 award. A data architect will provide much needed additional expertise for Idaho's growing data management initiative. In addition to this new full-time job, the C2 is funding a number of staff positions involved in the EPSCoR CI activities. This includes a web developer who is working with an EPSCoR data manager to develop a data portal to increase access and improve management of data relevant for research and research-based education associated with the RII Track 1, 2, and C2 awards.

Increasing bandwidth and video conferencing through the RII C2 grant is enabling: a) Improved delivery of video courses for distance education. b) Participation in the State's Idaho Education Network (IEN) and delivery of dual credit courses, eventually to any of the State's 200 high schools. c) Improved quality of access to college resources for current and prospective students. d) Improved access for employees and students to materials for work and research. e) Increased ability for faculty to participate in research efforts.

Idaho EPSCoR will help ensure that CI investments around the State are being fully utilized to communicate relevant research, provide access to new data sets, and train the next generation workforce. The first CI Event designed to improve awareness of new CI capabilities and EPSCoR opportunities is planned for Fall 2011.

The RII C2 is significantly enhancing the development, deployment, and improvement of broadband connectivity to foster collaboration among Idaho's public universities, community and undergraduate colleges, and schools.

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BOISE STATE UNIVERSITY

**SUBJECT**

Approval of Full Proposal to offer a new Doctor of Education (Ed.D.) in Educational Technology

**APPLICABLE STATUTE, RULE, OR POLICY**

Idaho State Board of Education Governing Policies & Procedures, Section III.G.5

**BACKGROUND/DISCUSSION**

Boise State University (BSU) proposes a new online, self-support graduate program leading to the degree of Doctor of Education (Ed.D.) in Educational Technology. The proposed program will be offered through the Department of Educational Technology in the College of Education. The proposed program builds on BSU's experience delivering both thesis-based and professional master's programs in educational technology online.

Recent legislation in Idaho and in many other states affirms the need for leaders in educational technology who have studied at the highest level. The proposed program will examine the use of current and emerging technologies for effective and efficient teaching and learning in a dynamic, global society. Areas of particular focus will include online teaching and learning, technology integration, academic technology leadership, innovative teaching in K-12 and higher education, educational web software or mobile applications development, and educational games and simulations.

Because technology changes so often and so quickly, programs should not focus on mastering today's instructional tools. If they did, graduates' skills would be outdated within a few years. Instead, the proposed program will focus on the attributes of effective instructional tools in the context of emerging technologies, and on the impact of changing technologies in the classroom.

The application of instructional technologies for improved teaching and learning fills an important niche in higher education, and the online format will provide access for students who presently do not have a tenable means to achieve a terminal degree. Thus, the cost of giving-up job, home, and family in order to seek a graduate degree in educational technology outside one's geographic area is too great for most working professionals today. Furthermore, many teachers who do have access to a doctoral program in Educational Technology within commuting distance find the in-class format too inflexible for their schedules as working professionals.

An additional benefit of the program is that faculty in the Department of Educational Technology will continue to create new technology systems, in partnership with their doctoral candidates. Such efforts are expected to spawn a

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hub of new business development in Idaho. One example of such an effort is the quest-based learning experience “3D GameLab,” which has generated thousands of dollars of revenue in the past year.

Consistent with Board Policy III.G., the proposed doctoral program was evaluated by two external reviewers, Dr. Sharon Smaldino of Northern Illinois University and Dr. Linda Polin of Pepperdine University.

The reviewers indicated that, *“after visiting with the program and college faculty, university administration, and students, we find the proposed program to be well designed, well documented, well resourced, carefully researched, and thoughtfully constructed.”*

**IMPACT**

The proposed program will be funded by self-support fees charged in accordance with Idaho State Board of Education policy V.R.3.b.v. At the present time, the department successfully offers a master’s level degree and graduate certificates in a self-support model.

The costs associated with this proposal are outlined in the budget and mainly represent a new tenure track faculty and library resources. However, increased enrollment and more in-depth research, will require more intensive librarian liaison time and increased need for interlibrary loan support to distance students in this program.

**ATTACHMENTS**

Attachment 1 – Full Proposal and external review to include response to external review, and faculty CVs. Page 5

**STAFF COMMENTS AND RECOMMENDATIONS**

Boise State University’s proposed Ed.D. in Educational Technology will have a set enrollment cap of 15-20 students per year. If the department determines they can take more, the enrollment cap could increase.

BSU currently offers thesis-based and professional master’s programs online through the Department of Educational Technology. Idaho State University offers similar programs in M.Ed. in Instructional Technology and Ph.D. in Instructional Design. The University of Idaho offers an M.S., Educational Specialist or Ph.D. in Adult/Organizational Learning and Leadership. However, BSU’s program is not a duplication of programs or services.

BSU’s request to offer a new Doctor of Education in Educational Technology is consistent with their Regional Mission Responsibility and with their current Eight-year Plan for Delivery of Academic Programs in the Southwest Region. Board staff and CAAP recommend approval as presented.

**INSTRUCTION, RESEARCH, AND STUDENT AFFAIRS**  
**AUGUST 11, 2011**

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**BOARD ACTION**

I move to approve the request by Boise State University to offer a Doctor of Education in Educational Technology.

Moved by \_\_\_\_\_ Seconded by \_\_\_\_\_ Carried Yes \_\_\_\_\_ No \_\_\_\_\_

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Institution Tracking No.

FP 10-36

**IDAHO STATE BOARD OF EDUCATION**  
**ACADEMIC/PROFESSIONAL-TECHNICAL EDUCATION**  
**FULL PROPOSAL**

Submitted by:

**Boise State University**

Institution Submitting Proposal

**College of Education****Department of Educational Technology**

Name of College, School, or Division

Name of Department(s) or Area(s)

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

**Doctor of Education (Ed.D.) in Educational Technology****2010 CIP: 130599****New Program**

Degree/Certificate &amp; 2010 CIP

Program Change, Off-Campus Component

Proposed Starting Date

**FALL 2012**

This proposal has been reviewed and approved by:

*Deane Boothe* 5/18/11  
 College Dean (Institution) Date

*Hay Pearson* 5/11/11  
 Chief Fiscal Officer (Institution) Date

*MES* 5/18/11  
 Chief Academic Officer (Institution) Date

*Robert Thibault* 6-3-11  
 President Date

*John R. Pelton* 6/3/11  
 VP Research and/or Graduate Dean Date

\_\_\_\_\_  
 Chief Academic Officer (OSBE) 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 \$250,000 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 NWCCU criteria?

This request is for a new doctoral program in the College of Education at Boise State University that will be self-support and offered online, and will lead to the degree of Doctor of Education (Ed.D.) in Educational Technology. The proposed program builds on many years of experience delivering both thesis-based and professional master's programs online through the Department of Educational Technology. These master's programs (Master of Educational Technology, and Master of Science in Educational Technology) and three associated graduate certificates provide advanced studies in the application of teaching and learning technologies. The proposed Ed.D. program in educational technology was developed in response to numerous requests from prospective students for an online doctoral program that generally examines the use of current and emerging technologies for effective and efficient teaching and learning in a dynamic, global society. Areas of particular focus will include online teaching and learning, technology integration, academic technology leadership, innovative teaching in K-12 and higher education, educational software/web or mobile applications development, and educational games and simulations.

Because Boise State University already offers an Ed.D. program, proposed program is unlikely to constitute a substantive change for the university as defined by Northwest Commission on Colleges and Universities (NWCCU) criteria. However, it is the NWCCU staff that makes the final determination of whether the creation of a particular program is a substantive change or merely a minor change. Once the program receives approval from the SBOE, Boise State University will follow standard protocol by sending a letter to the NWCCU describing the program, appending the approved full proposal, and requesting a decision regarding the proposed program. In the event that the NWCCU deems the creation of the program to be a substantive change, Boise State University will then prepare and submit the appropriate Substantive Change Proposal.

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.

Regional Institutional Accreditation: Boise State University is regionally accredited by the Northwest Commission on Colleges and Universities (NWCCU). Regional accreditation of the university has been continuous since initial accreditation was conferred in 1941. Boise State University is currently accredited at all degree levels (A, B, M, D). Regional accreditation was reaffirmed by NWCCU in 2010.

Specialized Accreditation: Boise State University's College of Education undergoes a rigorous review by the National Council for Accreditation of Teacher Education (NCATE) every seven years; it was reaccredited in Spring 2010. NCATE requires extensive collection of data according to quality measures and rubrics to ensure that undergraduate and graduate students are meeting standards within their chosen field of study. In educational technology, the program adheres to standards established by two highly respected bodies: the Association for Educational Communications and Technology (AECT) and the International Society for Technology in Education (ISTE). The university is currently evaluating the *Quality Matters* rubric for formative evaluation for online courses.

Program Review: Internal program evaluations will take place every five years as part of the normal departmental review process conducted by the Office of the Provost. This process requires a detailed self-study (including outcomes assessments) and a comprehensive review and site visit by external evaluators.

Graduate College: The program will adhere to all policies and procedures of the Graduate College, which is assigned broad institutional oversight of all graduate degree and certificate programs.

Department Processes: The Department of Educational Technology conducts student surveys for every course, in every semester, to ensure the ongoing quality of their courses and instructors. Furthermore, the departmental leadership is working with state and national bodies (such as the International Council for Online Learning or iNACOL) toward the

establishment of state standards and an endorsement for K-12 online educators. Finally, various technical courses use certification standards established by industry (e.g., Cisco, Microsoft).

Further, if this new program is a doctoral, professional, or research, it must have been reviewed by an external peer-review panel. A copy of their report/recommendations must be attached.

A copy of the report and recommendations by the external review team is attached in an appendix along with the response from Boise State University.

- 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 curriculum for the proposed Ed.D. program in educational technology and new course requests were approved by the Boise State University Graduate Council on March 15, 2011. As with the existing Ed.D. program in curriculum and instruction, the proposed Ed.D. program will require graduates to complete 66 total semester credits. The following degree requirements box show how these credits are distributed. Although not a requirement of the Graduate College, the Department of Educational Technology intends that all 600-level courses are exclusive to doctoral students.

<b>Doctor of Education in Educational Technology</b>		
<b>Course Number and Title</b>		<b>Credits</b>
<b>Core Courses</b>		15
EDTECH 601 Doctoral Studies Orientation.....	3	
EDTECH 602 Emerging Trends in Educational Technology.....	3	
EDTECH 603 Global & Cultural Perspectives in Educational Technology..	3	
EDTECH 604 Leadership in Educational Technology.....	3	
EDTECH 605 Project Management in Educational Settings.....	3	
<b>Research Courses</b>		15
EDTECH 561 Research in Educational Technology.....	3	
EDTECH 562 Introduction to Statistics for Educational Technology.....	3	
EDTECH 652 Quantitative Research Methods.....	3	
EDTECH 653 Qualitative Research Methods.....	3	
Research Elective.....	3	
A graduate research course applicable to education, educational technology, or a related field. The course is selected with student input and approved by the supervisory committee.		
<b>Cognate Area</b>		9
A three-course graduate sequence in education, educational technology, or a related field; all courses are selected with student input and approved by the supervisory committee.		
<b>Innovation Internship</b>		3
EDTECH 590 Practicum/Internship		
Students must have successfully completed all required core courses and cognate courses before entering the internship. Internship details are negotiated with student input and approved by the supervisory committee.		
<b>Elective Courses</b>		12
Graduate courses in education, educational technology, or a related field; all courses are selected with student input and approved by the supervisory committee.		
<b>Comprehensive Examination</b>		1
EDTECH 600 Assessment [Comprehensive Examination]		
<b>Dissertation</b>		11
EDTECH 693 Dissertation		
<b>TOTAL</b>		<b>66</b>

**NEW 600-LEVEL COURSES (approved by the Graduate Council on 15 March 2011)**

*(Please see appendices for list of all graduate courses offered by the Department of Educational Technology)*

**EDTECH 601 DOCTORAL STUDIES ORIENTATION (3-0-3)(F/S/SU).**

Introduction to the purpose and nature of doctoral studies in educational technology. Explores processes and procedures specific to the degree program, tools for collaboration and research, conferences and journals in the field, and graduate faculty research initiatives. Must be taken in first semester enrolled in doctoral program.

PREREQ: Admission into the doctoral program in Educational Technology.

**EDTECH 602 EMERGING TRENDS IN EDUCATIONAL TECHNOLOGY (3-0-3)(F/S/SU).**

Explores current topics and trends in educational technology research and their applications. Reviews literature and practices to identify emerging trends in the field.

**EDTECH 603 GLOBAL AND CULTURAL PERSPECTIVES IN EDUCATIONAL TECHNOLOGY (3-0-3)(F/S/SU).**

Explores the implementation of information and communications technologies (ICT) in educational systems outside of the United States. Examines promises and challenges of ICT integration in both developed and developing countries as impacted by different contexts.

**EDTECH 604 LEADERSHIP IN EDUCATIONAL TECHNOLOGY (3-0-3)(F/S/SU).**

Examines principles that guide innovative leadership of educational technology programs and initiatives. Focuses on the synthesis of theories, models, and processes that guide policy creation and active project implementation.

Emphasis on team building, organizational psychology, people and resources, and change management. PREREQ: EDTECH 601

**EDTECH 605 PROJECT MANAGEMENT IN EDUCATIONAL SETTINGS (3-0-3)(F/S/SU).**

Introduction to best practices and principles related to the management of projects in educational organizations (all levels, traditional or online). Emphasis on team building and leadership, establishing relationships, benchmarks and evaluative practices. Review and use of various project management software tools. PREREQ: EDTECH 601

**EDTECH 652 QUANTITATIVE RESEARCH METHODS (3-0-3)(F/S/SU).**

Overview of quantitative research approaches in educational research. Covers concepts of, and practice with, parametric and non-parametric tests and predictive analysis. Introduction to experimental design, survey sampling, and advanced statistical analysis. Purchase of statistical analysis software is required. PREREQ: EDTECH 562

**EDTECH 653 QUALITATIVE RESEARCH METHODS (3-0-3)(F/S/SU).**

Overview of qualitative research approaches in educational research. Reviews the theory, epistemological assumptions, and application of major methodologies. Focuses on developing skills in creating field notes, planning and conducting interviews, collecting relevant artifacts, analyzing data, and writing reports. Introduction to computer-assisted qualitative data analysis.

**EDTECH 662 ADVANCED QUANTITATIVE RESEARCH METHODS (3-0-3)(F/S/SU).**

Explores advanced concepts of quantitative theory and data analysis methods. Guides selection and application of multiple, appropriate levels of analysis to selected research questions. Purchase of statistical analysis software is required. PREREQ: EDTECH 562, 652

**EDTECH 663 ADVANCED QUALITATIVE RESEARCH METHODS (3-0-3)(F/S/SU).**

Explores specific qualitative methodologies in depth. Extensive practice in analysis of data based on a selected qualitative tradition, followed by the presentation of results. Focuses on the development, planning, and conduct of an applicable project. Includes further practice with computer-assisted qualitative data analysis. PREREQ: EDTECH 653

**EDTECH 671 DATA MINING RESEARCH METHODS FOR EDUCATION (3-0-3)(F/S/SU).**

Introduction to fundamental algorithms and methodologies for data mining and machine learning. Topics include techniques in pattern discovery and predictive modeling. PREREQ: EDTECH 562, 652

**EDTECH 672 DESIGN-BASED RESEARCH (3-0-3)(F/S/SU).**

Study and application of design-based research methodology, aimed to improve educational practices through iterative analysis, design, development, implementation, and generation back to theory. Emphasis on collaboration among researchers and practitioners in real-world settings. PREREQ: EDTECH 561



The doctoral dissertation will typically be one of two types:

- a) A written document that accounts for a solid grounding in theoretical aspects of the study, a description and justification of data collection tools and methods, a reporting of data collected, and an analysis of the data. In many cases the research will be contextually situated; for example, the study may revolve around demographic variables that impact student retention in an online middle school. In other cases the focus will be on basic research, for example, looking at the effect of multimedia on transfer in problem-solving skills.
- b) A written document that provides a rich, detailed description of a design or developmental process (ex., see Reeves, Herrington, & Oliver, 2004). The field of educational technology is particularly conducive to this type of work as it allows a student to become deeply familiar with learner needs and characteristics, requires him or her to carefully consider design elements, engage in multiple cycles of formative feedback, plan at least small scale implementation of the product, and conduct a summative evaluation report.

The format of the dissertation will vary somewhat, but will either be a series of chapters, or it may be a series of smaller studies, each ready for submission to a peer-reviewed journal, combined into a collection of chapters on a related theme (such as is the practice by many engineering and science disciplines).

As required by existing policy of the Graduate College, each student will be under the continuous guidance of a supervisory committee. The committee consists of 3-5 members of the graduate faculty appointed to the committee by the Graduate College based on recommendations from the Department of Educational Technology. The chair of the supervisory committee is the primary mentor for the student and must have previously chaired or co-chaired at least one other doctoral supervisory committee - either at Boise State University or elsewhere. If the chair is working with a less experienced co-chair, then her or his additional obligation will be to provide mentoring with regard to the process. To serve as co-chair, the committee member must have served as a member of at least one other doctoral supervisory committee. There will be no requirement to serve as a committee member other than appointment to the graduate faculty by the Graduate College.

Dissertation work will be facilitated just as any class or thesis work is currently - regular virtual meetings with professors and/or peers through technology tools that allow for asynchronous or synchronous communication. The department is in the process of creating policy that will help faculty resolve any issues that might be problematic (likely to be modeled on the carefully planned model by Northern Illinois University that emphasizes dispositions).

There is no residency requirement for an EdD degree at Boise State University.

- 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.

The table given below is a complete list of the instructional resource in educational technology anticipated to be in place for the third year of the proposed Ed.D. program in educational technology. Participation by adjuncts in the proposed Ed.D. program will be minor, variable, and by graduate course instruction (plus possible service as members of Ed.D. supervisory committees). One new tenure-track faculty member will be hired at the assistant professor level (this person is shown as TBA in the table and will have qualifications in instructional design and theoretical foundations). Individuals who are not anticipated to be formal participants in the proposed Ed.D. program in the third year of the program are marked by zero FTE.

NAME	FTE	DEGREE	RANK	SPECIALTY
Baek, Y K.	0.15	Ph.D.	Professor	Educational games & simulations
Ching, Y-H.	0.00	Ph.D.	Visiting Assistant Professor	Instructional design; theoretical foundations
Dawley, L.	0.26	Ph.D.	Professor	K12 teaching and learning; teacher professional development; educational games
Hsu, Y-C.	0.24	Ph.D.	Assistant Professor	Research methods; message design; online teaching and learning
Hung, A.	0.26	Ed.D.	Assistant Professor	Data mining; Networking; multimedia development
Perkins, R.	0.37	Ph.D.	Assistant Professor	Change theory; instructional design; ICT4D; evaluation
Rice, K.	0.15	Ed.D.	Associate Professor	K12 online teaching and learning; teacher professional development
Schroeder, B.	0.13	Ed.D.	Clinical Associate Professor	Technology integration; multimedia development
Snelson, C.	0.26	Ed.D.	Associate Professor	Web-based video; multimedia development; technical skills
Wyzard, C.	0.26	Ph.D.	Professor	K12 technology integration; research methods
Yang, D.	0.26	Ph.D.	Assistant Professor	Theoretical foundations; research methods
TBA	0.29	Ph.D.	Assistant Professor	Instructional design; theoretical foundations
Haskell, C.	0.00	M.E.T.	Instructor	K12 technology integration; educational gaming; virtual learning environments
DeLoose, S.	0.00	M.Ed.	Adjunct	K12 technology integration
Flannelly, S.	0.00	Ed.D.	Adjunct	Instructional design
Freed, J.	0.03	Ph.D.	Adjunct	Theoretical foundations
Gerstein, J.	0.02	Ed.D.	Adjunct	K12 technology integration
Gibson, D.	0.00	Ed.D.	Adjunct	Educational games and simulations; virtual learning environments
Grey-Dove, T.	0.01	Ed.D.	Adjunct	K12 online teaching and learning
Hall, D.	0.01	Ed.D.	Adjunct	Course and courseware design and evaluation
Kaiser, L.	0.02	M.S.	Adjunct	Message design
Letourneau, T.	0.02	Ph.D.	Adjunct	Online teaching and learning
Randall, A.	0.02	Ed.S.	Adjunct	Online teaching; adult education
Silver, E.	0.00	M.A.	Adjunct	K12 technology integration and management
Thompson, J.	0.00	Ph.D.	Adjunct	Evaluation; technology integration
Worthington, J.	0.00	Ph.D.	Adjunct	Grant writing

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

The Department of Educational Technology has documented considerable interest in the proposed Ed.D. program in educational technology from its master's students, as well as from graduates of master's programs in education earned external to Boise State University. Inquiries are almost entirely from working educators, most in mid-career situations. They want to work either as teachers, educational technologists, or instructional designers in higher education after years in the K-12 system; others want to qualify for district-level or state-level jobs requiring doctorates in educational technology. Demographically, they are equally divided by gender and generally fall into the 30-45 age bracket. Geographically, inquiries come from all parts of the United States, as well as from U.S. citizens living and working overseas.

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

*Personnel.* The Ed.D. in Educational Technology will be primarily administered by a faculty program director in coordination with the department chair and associate chair, all assisted by an eight-person administrative support staff that includes an admissions coordinator, an admissions advisor, a post-admission advisory coordinator, a manager of student outreach services, and a graphic/instructional designer. The department has nine tenure-track or tenured faculty members, one clinical associate professor, a number of adjunct professors who teach courses, and plans to hire one additional tenure-track faculty member. A full listing of the faculty as configured for the third year of the program is given in section 2.b (above), a full listing of participating faculty members and faculty FTE effort by year for the first three years of the program, and a full listing of administrators and administrative support staff is given by tables placed after section 6.e (below).

*Graduate Assistants.* The department currently funds between five and ten graduate students each year, and some of these will become Ed.D. students upon implementation of the proposed program. Additional graduate assistants will be funded through anticipated grant and contract activity.

*Library.* The Albertsons Library at Boise State has done an outstanding job of acquiring periodicals, books/monographs and databases to support the existing programs in Educational Technology, and will continue to do so for the proposed program. The library actively seeks ways to positively support students studying at a distance. For example, electronic books are purchased for student online access, and library workshops are delivered electronically to support students at distance. Faculty members in the College of Education routinely work with their library liaisons to review and improve access to information resources. The library resources now in place are adequate to support the current curriculum and with the suggested additions, see 6.d. (1), will also support the proposed EdD in Educational Technology.

*Equipment.* Research in educational technology requires information and the capacity to extract, analyze, and manage electronic data. In addition to servers maintained by the department to host their website, faculty and student work, the department also purchases specialized software for instructional and administrative purposes, including web conferencing software, Moodle LMS, and Salesforce. All equipment purchases are made using departmental funds, and because students will study at a distance, any upgrades to computer or network connections will be incurred by them. Affiliated personnel anticipate updating equipment as needed through ongoing grant and contract activity.

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

The proposed new program will be delivered online. Presently, there are no plans to expand the proposed program beyond that described herein.

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?

Boise State University's proposed program, once approved, will be the only Ed.D. program in educational technology in Idaho. Two programs at other institutions have some similarities but are substantially different from the proposed program: Idaho State University offers a Ph.D. in "Instructional Design" and the University of Idaho offers a Ph.D. in "Adult/Organizational Learning and Leadership."

Boise State University's proposed Ed.D. program in educational technology differs from the Ph.D. programs at the University of Idaho and at Idaho State University in the following ways:

#### Differences in the Nature of the Program

Both the Ph.D. and Ed.D. are recognized as research degrees by the U.S. Department of Education and the National Science Foundation. However, we recognize an important distinction between the two degrees in terms of focus. Following the line of reasoning about education doctorates created by the Carnegie Foundation (Carnegie Project on the Education Doctorate; <http://cpedinitiative.org/CEPD>), the focus of the Ed.D. in Educational Technology will be to prepare the candidate for professional practice and applied research. In contrast, the Carnegie Foundation describes a Ph.D. as a degree with the primary focus on basic research. The comparison often made compares the person who has a research degree in a medical field versus a person who obtains a medical or osteopathic degree. Whereas the former is critical to the practice of medicine, the researcher is not him or herself engaged in its application in a clinical setting. The latter, a physician who is a specialist or generalist, is analogous to the professional graduating from an Ed.D. program, where the emphasis is on practice and application of educational research. In both the Ph.D. and Ed.D. programs an understanding of how to do research and theoretical connections is crucial, but the education doctorate as we envision it creates a community of learners who attend to the realities of technology as found in a variety of educational settings.

#### Differences in Content

Master's level programs currently offered by the Department of Educational Technology at Boise State University include online teaching (K-12 and higher education strands), technology integration, and school technology coordination, and these are the only programs offered in Idaho that focus on these three areas. By creating a more-advanced Ed.D. degree opportunity, we will support stronger leadership in educational technology both in Idaho and outside of it. Our Ed.D. graduates will support and guide emerging models of technology-enhanced learning that are developing throughout the state and country.

Graduates of the proposed Ed.D. program in educational technology will have the ability to expertly integrate technology with learning experiences (at all levels) through innovative means of delivery, practice, feedback, and assessment. Their expertise will be honed through exposure not only to design and learning theories, but also through repeated exposure to authentic environments where 21st century tools are integrated into various teaching and learning contexts.

in contrast, the Ph.D. program at UI enables students to specialize in adult basic education, adult training, and human resource management, and graduates can secure jobs as "adult educators in colleges and universities, managers of training and development, human resource specialists, training consultants and instructional designers" (from UI website). And the Ph.D. program at ISU "prepares students to assume positions of leadership in instructional design, research, measurement, or evaluation ... candidates are provided primarily with courses and experiences preparing them to function more effectively as leaders in guiding instruction to meet specific educational outcomes" (from ISU website). It should also be noted that students in the ISU Ed.D. program in educational leadership no longer have the option of doing cognate studies in the area of instructional technology (according to the program description listed in the ISU doctoral handbook).

#### Differences in Mode of Delivery

The proposed Ed.D. program in educational technology will be offered in an entirely online format, in essentially the same format as our fully online master's programs in educational technology that have proved to be a local, national, and international success. The proposed program will be modeled in part after a program at the University of Florida. In contrast, neither the Ph.D. program at ISU nor the Ph.D. program at UI is fully online, and both require that students take at least some courses on-campus or at remote locations (centers in Meridian, Boise, and Idaho Falls). Our proposed Ed.D. program will enable students to work on their degree requirements regardless of location and will not require their presence on the main university campus or any of its related sites.

Comparison to programs offered at public universities in states bordering Idaho

University	Ed.D. available?	EDTECH Specific?	Online Program?
Central Washington Univ.	No	--	--
Eastern Oregon University	No	--	--
Eastern Washington Univ.	No	--	--
Evergreen State College (WA)	No	--	--
Montana State University - Bozeman	Yes	No	No
Nevada State College	No	--	--
Oregon State University	Yes	No	No
Portland State University (OR)	Yes	No	No
Southern Oregon State Univ.	No	--	--
Southern Utah University	No	--	--
Univ. of Washington	Yes	No	No
University of Montana	Yes	No	No
University of Nevada – Las Vegas	Yes	Option	No
University of Nevada – Reno	Yes	No	No
University of Oregon	Yes	No	No
University of Utah	Yes	No	No
University of Wyoming	Yes	Yes	Part
Utah State University	Yes	No	No
Washington State Univ.	Yes	No	No
Weber State University (UT)	No	--	--
Western Oregon Univ.	No	--	--
Western Washington Univ.	No	--	--

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

Institution and Degree name	Level	Specializations within the discipline	Specializations offered within the degree at the institution
<b>BSU</b> M.S. or M.E.T. in Educational Technology	Master's	integration of educational technologies, eLearning pedagogy and delivery, digital media development, research on innovations in teaching and learning	Online Teaching; Technology Integration; School Tech. Coordination.
M.S. in Instructional & Performance Technology	Master's	Instructional designer, curriculum development, training, workforce development, project management, technical writing, e-learning development, organizational development, research analysis, and performance consulting	Human Performance Technology; Workplace eLearning & Performance Support; Workplace Instructional Design
<b>ISU</b> M.Ed. in Instructional Technology or Ph.D. in Instructional Design	Master's & Doctoral	instructional design, research, measurement, or evaluation	Instructional Technology; Instructional Design
<b>UI</b> M.S., Ed Specialist or Ph.D. in Adult/Organizational Learning and Leadership	Master's & Doctoral	adult education, management of training and development, human resources, training consulting, and instructional design	Adult/Organizational Learning and Leadership

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 / Degree Program	Relevant Enrollment Data			Number of Graduates		
	Curr. Year	Prev. Year	Prev. Yr.	Curr. Year	Prev. Yr.	Prev. Yr.
BSU: M.S. or M.E.T. in Educational Graduate Certificate	308 264	255 200	185 115	80 53	61 36	45 20
BSU: M.S. in Instructional & Performance Technology Graduate Certificate	161 97	160 69	157 43	36 28	46 17	33 11
ISU: M.Ed. in Instructional Technology	12	16	21	6	4	5
ISU: Ph.D. in Instructional Design	36	39	29	-	-	-
UI: M.S. Adult & Organizational Learning	-	3	10	2	8	11
UI: M.S. Adult & Organizational Learning & Leadership	57	43	24	7	2	-
UI: Ed.D. Education	2	5	6	-	-	3
UI: Ph.D. Education	25	31	49	6	2	16
UI: Ed.S. Adult & Organizational Learning	11	1	1	-	1	3
UI: Ed.S. Adult & Organizational Learning & Leadership	-	13	9	3	-	7

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.

In its “Current Institutional Role and Mission” statement, the Idaho State Board of Education expects Boise State University to function as follows:

- Be a “comprehensive, urban university serving a diverse population through undergraduate and graduate programs, research, and state and regional public service,”
- Provide a variety of programs, including teacher preparation, and
- Use a “variety of delivery methods to meet the needs of diverse constituencies; this specifically includes distance learning for delivery of programs and services.”

This proposed doctorate aims to accomplish these goals by

- reaching a national and international student body much more diverse than the population in Idaho,
- creating variety in graduate programs because of its exclusive focus, and
- innovating in the delivery of doctoral studies and research.

The Department of Educational Technology aims to achieve these goals by aligning its plan with the ten goals of Boise State University’s strategic mission “Charting the Course” (2006):

Goals of BSU strategic mission	EDTECH plans to achieve the goal
Respond to the educational needs of the region	◦ Offer flexible course delivery options that meet the need of working professionals.
Develop network and outreach opportunities with the community	◦ Promote collaboration and sharing of information between campus and the K-20 educational technology community.

Provide development opportunities for faculty to integrate teaching and research	<ul style="list-style-type: none"> <li>◦ Align educational offerings with economic and educational needs;</li> <li>◦ Develop flexible workload policies for faculty;</li> <li>◦ Reward and promote successes in integration of teaching and research.</li> </ul>
Promote diverse communities that foster faculty, staff, and student interaction	<ul style="list-style-type: none"> <li>◦ Create active learning opportunities in and out of class;</li> <li>◦ Develop and promote programs to introduce international diversity on campus;</li> <li>◦ Hold synchronous video seminar series with invited lecturers on “Diversity in Educational Technology”;</li> <li>◦ Develop ongoing student leadership opportunities through the online EdTech Graduate Student Association.</li> </ul>
Provide student-centered services	<ul style="list-style-type: none"> <li>◦ Offer flexible course delivery options;</li> <li>◦ Promote involvement in social, intellectual and virtual community events;</li> <li>◦ Support ongoing doctoral student outreach through our Office of Student Outreach Services.</li> </ul>
Create an organization that is responsive to change	<ul style="list-style-type: none"> <li>◦ Reward innovative research and teaching that support overall program goals, which are focused on educational use of emergent technologies.</li> </ul>
Recruit and retain an academically prepared and diverse student body	<ul style="list-style-type: none"> <li>◦ Expand student recruitment efforts;</li> <li>◦ Explore potential underserved distance learning markets such as historically black undergraduate colleges.</li> </ul>
Recruit and retain faculty and staff to support the vision	<ul style="list-style-type: none"> <li>◦ Promote and reward faculty and staff who support the overall department and university mission;</li> <li>◦ Facilitate faculty collaborations across campus;</li> <li>◦ Secure funds for sponsored research activity;</li> <li>◦ Develop compensation and workload plans consistent with those of a metropolitan research university.</li> </ul>
Obtain fiscal resources necessary to support the vision	<ul style="list-style-type: none"> <li>◦ Create additional opportunities for student financial assistance, including Graduate Assistants;</li> <li>◦ Secure additional funds for sponsored research activities;</li> <li>◦ Maximize the ability to use self-support funds to support overall program vision and needs;</li> <li>◦ Explore options for additional department-based student scholarships/fellowships.</li> </ul>
Build and maintain facilities to support programs and create an attractive and accessible environment	<ul style="list-style-type: none"> <li>◦ Support current and implement new technologies to foster an effective virtual learning environment.</li> </ul>

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 data collection; dissemination of assessment results; program design and on-going assessment. (See Board policy III.X., Outcomes Assessment.)

Because technology is such a rapidly changing force in our society, programs cannot simply prepare leaders to master today's instructional tools. If they did, graduates' skills would be outdated within a few years. Instead, programs must focus on two over-arching principles: 1) attributes of effective instructional tools, and 2) the context of the classroom as impacted by changing technologies. Recent legislation in Idaho and in many other states affirms the need for leaders in educational technology who have studied at the highest level; it is a need Boise State hopes to meet with its doctoral program. As technology is such a varied field, the proposed Ed.D. program in educational technology at Boise State University would encompass a wide array of specializations inherently beneficial to public education in Idaho and the nation.

The demand for the proposed program was determined as follows:

*Idaho State Department of Labor Information:*

The following is a projection of state work force needs, which includes job titles requiring this degree and data on employment potential within the state.

- Director, Academic Technologies (Higher Ed. or Corporate)
- Technology Coordinator, K-12 school district
- Professor, Educational/Instructional Technology
- Senior eLearning Specialist
- Supervisor, Online training and development
- Head of School (or other administrator), Online School
- Vice President, Learning & Development
- Project Manager, Game/Software/Multimedia/Mobile Apps
- Learning Evaluation Professional

The Idaho Department of Labor's "Occupational Projections 2008-2018" shows an average annual growth of 1.63% in the sectors represented above, with a 17.90% positive change in employment. In sectors that would benefit from educational technology expertise, it is estimated that approximately 259 new positions are expected annually.

*Survey of Master's Students*

A survey was conducted with Boise State University master's students in educational technology to quantify demand for the skills and knowledge that would result from a doctoral program in educational technology: 109 students were contacted and 94 responded (86%). The survey showed a strong correlation between the proposed doctoral program's curriculum and students' needs. Respondents rated seven areas of emphasis as important or very important.

- 96% found Online Teaching either important (24%) or very important (72%),
- 94% reported Technology Integration is either important (29%) or very important (65%),
- 93% noted Emerging Technologies as either important (30%) or very important (63%),
- 89% found that eLearning Design is either important (36%) or very important (53%),
- 82% noted that Educational Technology Leadership is either important (37%) or very important (45%),
- 79% reported that Instructional Design and Evaluation are either important (38%) or very important (41%),
- 69% found Instructional Theory either important (44%) or very important (25%).

*Inquiries from Interested Individuals*

Following an announcement that the Department of Educational Technology was examining the possibility of an online doctoral program, program personnel received well over a hundred inquiries in one year. Those inquiries are indicative of the demand for the proposed doctoral curriculum in an online format. The program is appealing partly due to the fact that working professionals would not have to quit their job, sell their house, and uproot their families to earn a doctorate. The demand is far greater than BSU's ability to fill the need.

*Benefits to the Region, the State, and the Nation*

The proposed Ed.D. program in educational technology is a natural extension of the very popular and widely respected master's programs in the same discipline at Boise State University. The master's programs have been fully



online since 1999 and constitute the largest graduate population at the university. The master's programs are one of the largest university-based trainers of online teachers in the nation, and Boise State University is one of the first universities to offer graduate-level courses in how to teach effectively in virtual worlds. The president of the Society for Information Technology and Teacher Education, recently stated that the educational technology program at Boise State is "one of the most innovative EdTech programs in America."

As a self-support program, the Department of Educational Technology has generated enrollments and tuition revenue from across the United States and from two dozen international locations, generating tuition revenue of approximately \$1.8M in 2010 alone. Because the majority of students (85%) live outside of Idaho, the department is in effect an exporter of education and an importer of revenue. This revenue hires employees, employs local vendors, and awards graduate assistantships and scholarships to students living in Idaho and elsewhere.

As a program focused on emerging technologies for teaching and learning, the Department of Educational Technology has developed several new technology systems and tools that have not only generated additional revenue for the program, but are now going through the technology transfer process, creating a hub of new business development in Idaho. For example, a virtual world teaching simulation ("EdTech Island"), has generated thousands of dollars in revenue in the four years since its inception. The "3D GameLab," a quest-based learning experience instituted in the summer of 2010, is projected to generate more than \$100,000 in the summer of 2011. These and other new initiatives provide doctoral students with real-world, hands-on experience. All revenues from these programs go directly back to the department.

In conclusion, the state's economy—and by extension the nation's economy—thus benefits in three tangible, direct ways from those who graduate from the proposed Ed.D. program in educational technology. First, graduates will help educate a workforce ready and able to innovate in the 21st century. Second, graduates will project their expertise into national and international arenas based on empirical research and evaluation in the field of Educational Technology. Finally, given that so many opportunities in this field allow for "telecommuting," it is possible that graduates with these skills would live in Idaho, where they would shop and pay taxes while holding a job that may be hundreds or thousands of miles away.

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

#### *Source, Characteristics, and Number of Students*

The online master's degree program in educational technology offered by Boise State University is one of the largest of its kind compared to similar institutions offering the same degree (only for-profit universities have a larger enrollment). Prospective students come from many areas nationally and internationally. There are hundreds of requests for information about the program each year from prospective students who have visited the department's website, those who have been referred to us by a current student, or who have learned about our program at a conference. We expect a similar level of interest in the proposed Ed.D. program.

We expect that students in the proposed Ed.D. program in educational technology will be mid-career professionals working in schools across Idaho and the nation, and as such, most will be part-time students. As noted above, there is great demand for an online doctorate in this field of study, particularly from a well-respected graduate program. Students from other departments at Boise State University (and those at other Idaho universities) will likely only apply to the proposed program if they have a background in educational technology or a related field. The Department of Educational Technology plans to set an Ed.D. enrollment cap of 15-20 students per year. If departmental leadership determines that it can intake more, the enrollment cap will likely be increased.

The Department of Educational Technology currently employs eight staff members full-time (seven full-time, one part-time). Of these, five are specifically committed to student recruitment, retention and advising issues. One staff member manages student outreach services, which includes the oversight of the admissions coordinator and a part-time admissions advisor. Another person devotes his time to post-admissions advising, while the other staff member is a records specialist. Students enrolled in the Ed.D. program will be advised by a faculty mentor, but supported just as all students are by the other staff members. Faculty members who travel to conferences are asked to provide information about the program to those who might be interested. One of the department recruiters makes regular

appearances at local and national conferences (including one which regularly has more than 12,000 attendees, all of whom fit very well within the demographics of our enrollees).

#### *Student Demand*

The department conducted a survey of its students of needs and goals. Of the nearly 100 students who responded, 86% indicated a strong interest in a proposed online doctoral program. When asked why they would want to earn a doctorate in Educational Technology at Boise State:

- 96% cited the “ability to take courses online,”
- 89% cited the “ability to take courses part-time,”
- 74% cited the quality and reputation of the department,
- 58% cited the quality and reputation of the university, and
- 48% cited specializations match their research interests.

As noted in section 6.A., the department receives many inquiries from students interested in enrolling in an Ed.D. program in Educational Technology.

The proposed doctoral focus on emerging technologies for improved teaching and learning fills an important niche in higher education because the program reaches potential students who presently do not have a tenable means to achieve a terminal degree. The cost of making such a tremendous sacrifice—giving-up job, home, and family ties to seek a degree outside one’s geographic area—is too great for most working professionals today. Jobs are too difficult to get and the housing market too unstable. The few teachers who have a doctoral program in Educational Technology within commuting distance find it too costly and generally not tailored to the schedules of working professionals.

Approximately 85% of Boise State University students in educational technology live out-of-state, making the existing online master’s program an exporter of education and an importer of tuition revenue from all parts of the country. The existing program enrolls more students from California than any other state except Idaho. Even in highly populated states, most online students live in small and medium-sized towns where locally based graduate programs are not available, and doctorates are particularly unavailable. Boise State University has established its capability to attract students from these areas with graduate programs. The need and opportunity for an online doctoral program in educational technology is much greater because few online doctorates currently exist in the field.

Both Harvard and MIT are renewing interest in educational gaming and simulations, for example, and Stanford now offers a Ph.D. in Learning Sciences, Technology and Design that incorporates “complete foundational research on learning and design of innovative learning technologies.” But these programs cannot meet the needs of interested educators around the nation because the programs and the potential students are place-based. The proposed online doctorate can meet the needs of professionals no matter where they live. Furthermore, the few existing online doctoral programs do not compete with the proposed doctorate in cost or focus of curriculum.

- 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 described earlier, the proposed Ed.D. program in educational technology builds upon successful, nationally recognized online master’s programs delivered online through the Department of Education Technology.

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	<u>13</u>	FY	<u>14</u>	FY	<u>15</u>
	FTE	Headcount	FTE	Headcount	FTE	Headcount
A. New enrollments	<u>8.8</u>	<u>12</u>	<u>17.5</u>	<u>24</u>	<u>22.9</u>	<u>36</u>
B. Shifting enrollments	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

## II. EXPENDITURES

	FY	<u>13</u>	FY	<u>14</u>	FY	<u>15</u>
	FTE	Cost	FTE	Cost	FTE	Cost
A. Personnel Costs						
1. Faculty	<u>1.91</u>	<u>114,570</u>	<u>2.49</u>	<u>150,690</u>	<u>2.63</u>	<u>161,513</u>
2. Administrators	<u>0.45</u>	<u>29,315</u>	<u>0.45</u>	<u>29,902</u>	<u>0.45</u>	<u>30,500</u>
3. Adjunct faculty	<u>0.02</u>	<u>589</u>	<u>0.04</u>	<u>1,362</u>	<u>0.13</u>	<u>4,595</u>
4. Graduate/instructional assistants	<u>3.00</u>	<u>48,000</u>	<u>6.00</u>	<u>97,920</u>	<u>6.00</u>	<u>99,878</u>
5. Research personnel	<u>0.00</u>	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>	<u>0</u>
6. Support personnel	<u>0.40</u>	<u>15,051</u>	<u>0.65</u>	<u>24,325</u>	<u>0.80</u>	<u>30,742</u>
7. Fringe benefits	<u>N/A</u>	<u>54,780</u>	<u>N/A</u>	<u>72,345</u>	<u>N/A</u>	<u>78,502</u>
8. Other: <u>(Tuition/Fees)</u>	<u>N/A</u>	<u>25,713</u>	<u>N/A</u>	<u>53,996</u>	<u>N/A</u>	<u>56,696</u>
<b>Total FTE Personnel And Costs:</b>	<u>5.78</u>	<u>288,018</u>	<u>9.63</u>	<u>430,540</u>	<u>10.0</u>	<u>462,426</u>

	FY <u>13</u>	FY <u>14</u>	FY <u>15</u>
B. Operating expenditures			
1. Travel	<u>9,730</u>	<u>13,970</u>	<u>15,890</u>
2. Professional services	<u>1,125</u>	<u>1,300</u>	<u>1,500</u>
3. Other services	<u></u>	<u></u>	<u></u>
4. Communications	<u>1,000</u>	<u>1,000</u>	<u>1,000</u>
5. Utilities	<u></u>	<u></u>	<u></u>
6. Materials & supplies	<u>4,500</u>	<u>4,500</u>	<u>4,500</u>
7. Rentals	<u></u>	<u></u>	<u></u>
8. Repairs & maintenance	<u>1,000</u>	<u>2,000</u>	<u>3,000</u>
9. Materials & goods for manufacture & resale	<u></u>	<u></u>	<u></u>
10. Miscellaneous	<u>7,000</u>	<u></u>	<u></u>
<b>Total Operating Expenditures:</b>	<u>24,355</u>	<u>22,770</u>	<u>25,890</u>
	FY <u>13</u>	FY <u>14</u>	FY <u>15</u>
C. Capital Outlay			
1. Library resources	<u>8,000</u>	<u>8,000</u>	<u>8,000</u>
2. Equipment	<u>0</u>	<u>0</u>	<u>0</u>
Total Capital Outlay:	<u>8,000</u>	<u>8,000</u>	<u>8,000</u>
D. Physical facilities Construction or major Renovation	<u>0</u>	<u>0</u>	<u>0</u>
E. Indirect costs (overhead)	<u>16,019</u>	<u>23,106</u>	<u>24,768</u>
<b>GRAND TOTAL EXPENDITURES:</b>	<u>336,392</u>	<u>485,233</u>	<u>520,121</u>

## III. REVENUES

	FY <u>13</u>	FY <u>14</u>	FY <u>15</u>
A. Source of funds			
1. Appropriated funds -- Reallocation – MCO	_____	_____	_____
2. Appropriated funds -- New – MCO	_____	_____	_____
3. Federal funds	_____	_____	_____
4. Other grants	_____	_____	_____
5. Fees	<u>336,392</u>	<u>485,233</u>	<u>520,121</u>
6. Other: _____	_____	_____	_____
<b>GRAND TOTAL REVENUES:</b>	<u>336,392</u>	<u>485,233</u>	<u>520,121</u>

	FY <u>13</u>	FY <u>14</u>	FY <u>15</u>
B. Nature of Funds			
1. Recurring*	<u>329,392</u>	<u>485,233</u>	<u>520,121</u>
2. Non-recurring**	<u>7,000</u>	<u>0</u>	<u>0</u>
<b>GRAND TOTAL REVENUES:</b>	<u>336,392</u>	<u>485,233</u>	<u>520,121</u>

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

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

**NOTES for Line Items in Tables I, II, and III**

- I.A One student FTE is assumed to be 24 student credits or 12 credits per semester for an academic year (fall and spring semesters); most students are projected to take less than 24 credits per academic year.
- I.B It is anticipated that only master's degree holders will be admitted to the Ed.D. program so that there will not be any shifting enrollments from the existing master's programs in educational technology or other master's programs in education.
- II.A.1 Faculty FTE estimates are tied to university faculty workload policy 4560 and based on a three-year teaching plan for the Department of Educational Technology. Faculty cost estimates are based on academic year salaries, with FY11 salaries assumed for the first year of the program, and then 2% annual adjustments applied for the second and third years of the program. See tables attached after section 6.e for details.
- II.A.2 Administrative FTE estimates are based on experience with the existing Ed.D. program in curriculum and instruction and allow for the online nature of the proposed program. Administrative cost estimates are based on administrative contract salaries that vary in duration depending on the position, with FY11 salaries assumed for the first year of the program, and then 2% annual adjustments applied for the second and third years of the program. See tables attached after section 6.e for details.
- II.A.3 Adjunct faculty members are paid on a per course basis and are anticipated to teach mostly master's students and a modest number of doctoral students in graduate courses; the resulting doctoral program FTE is thereby quite small.
- II.A.4 Graduate instructional assistants will not teach in the PhD program but will provide assistance with the delivery of the master's programs in educational technology. A graduate assistantship includes a 9-month \$16,000 stipend and an academic year tuition and fee waiver. Annual adjustments of 2% and 5% are assumed for stipends and tuition and fee waivers, respectively.

- II.A.5 The proposed program does not involve research support personnel.
- II.A.6 See tables attached after section 6.e for details on administrative support personnel.
- II.A.7 Fringe benefits are computed using FY11 fringe rate parameters defined for various employee categories by the university budget office and available at <http://finad.boisestate.edu/budget/pdf/FY11fringe.pdf>. The fringe rate for graduate assistants is computed at 4% during the academic year.
- II.A.8 The FY11 cost of a full-time academic year graduate tuition and fee waiver is \$7,774. This cost is projected into future years using an assumed annual increase of 5%. Thus, we project a full-time academic year graduate tuition and fee waiver to be  $\$7,774 \times 1.05 \times 1.05 = \$8,571$  at program start in FY13, and then to increase annually by 5% for the first three years of the program.
- II.B.1 Annual faculty and staff travel to attend conferences is Ed.D. program proportion of overall travel budget.
- II.B.4 Communications budget estimated as additional expense resulting from increased recruiting communications and new Ed.D. students.
- II.B.6 Costs of materials and supplies estimated from experience with master's programs in educational technology adjusted for differences in enrollment between Ed.D. and master's programs.
- II.B.8 Costs of maintenance and replacement of hardware and software estimated from experience with the master's programs in educational technology; program cost is in same proportion to total cost as estimated Ed.D. enrollment is to total enrollment in online department programs.
- II.B.10 The \$7,000 expenditure is the anticipated startup cost for the new tenure-track faculty hire.
- II.C.1 Cost estimates for new library resource cost are based on discussions between program faculty and the Dean of Libraries. See section 6.d for details.
- II.C.2 No new equipment costs are anticipated for the proposed program (beyond ongoing maintenance and replacement).
- II.D No construction or renovation costs are anticipated for the proposed program.
- II.E Indirect costs associated with the proposed program calculated as 5% of total budget in alignment with our current practice.
- III.A.5 Fees are self-support fees as described in Idaho State Board of Education policy V.R.3.b.v (as of September 2009).
- III.B.2 See note II.B.10.

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

Detailed three-year lists and projections for faculty FTE effort, student FTE enrollment, and faculty program salary costs, and the FTE effort and costs for support personnel, are provided in the tables attached after section 6.e below.

Because the proposed program is self support and because it is being created in a department that has both self support and non-self support components, it would be useful to account for the source of funding for faculty members in existing programs and in the proposed program.

Current Faculty Allocations: These allocations will remain fixed to support existing programs.

- 4 appropriated tenure-track FTE: one department chair, plus coverage of 20 sections of EdTech 202 per year (undergrad).
- 8 self-support faculty FTE: five tenure-track, one assistant visiting, one associate clinical, one special lecturer. All are allocated to our master's level graduate programs.

Additional Faculty for the Proposed EdD Program: Additional faculty and administrative support were budgeted for the proposed EdD as follows, and all will be supported by self support funding.

- Faculty Year 1: 1.91 FTE
- Faculty Year 2: 2.49 FTE (total)
- Faculty Year 3: 2.63 FTE (total)
- Admin for Years 1-3: .45 FTE

## 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 proposed Ed.D. program in educational technology will be administered by a graduate program coordinator who reports to the department chair (who is assisted by the associate chair). The graduate program coordinator interacts with the departmental faculty, program students, and the departmental administrative support staff (described in section 2.d above). The graduate program coordinator also participates in the formal graduate program management structure within the College of Education, and is the interface between the proposed Ed.D. program and the Graduate College. Detailed three-year lists and projections for program effort and costs by departmental administrators and departmental administrative support personnel are provided in the tables attached after section 6.e below. The fiscal impact of the proposed Ed.D. program on the administrative structure of the College of Education (outside the Department of Educational Technology) and the Graduate College are expected to be absorbed by existing staff and infrastructure and are not estimated for this proposal.

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

The proposed Ed.D. program in educational technology is expected to generate increased annual departmental operating costs as shown in table II section B for travel, communications, materials and supplies, and repair and replacement of hardware and software.

## 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.

The Library has a strong interlibrary loan and acquisitions on-demand service in place to meet the needs of the faculty, students, and staff of the university for access to information resources not available in the Library or through current subscriptions. Materials can be, and are, routinely obtained and delivered electronically to almost any location in the world.

During spring semester 2010, the librarian liaison for educational technology asked the faculty of the Department of Educational Technology a series of questions related to the use of the Library and their satisfaction with current resources. The responses were generally favorable with the exception of repeated requests for more access to electronic resources, specifically online journals and electronic books.

The University Library analyzed the library needs of the new program and provided the following recommendations for the proposed Ed.D. program in educational technology:

**Ebooks:** \$3,000 annual cost

Cost of purchasing individual ebooks, outside of EBL (Ebooks Library) or Books24x7, estimated as 20 ebooks per year with an average price of \$150 per ebook.

**online journals:** \$5,000 annual subscription cost

Cost of requests for new online journals, specific titles will be determined by the focus of the program and the research interests of the new faculty.

**Books24x7:** \$30,000 annual subscription cost

The most recent quote for a library subscription to Books24x7 is approximately \$30,000 per year. The campus does have a subscription to Books24x7 for Training and Development purposes but access is not available to students.

**EBL (Ebook Library):** \$25,000 annual cost

The Library is currently exploring access to EBL, an ebook collection, but has not yet received a quote. Based on the experience of similar type academic libraries, the cost for EBL is estimated to be a minimum of \$25,000 per year.

At the present time, funding has been committed for the Ebooks and the online journals. The university is presently considering providing funding for a phased introduction of the Books24x7 and EBL resources. These latter two resources (Books 24x7 and EBL) would serve the needs of faculty, students, and staff in many campus programs besides the graduate programs in educational technology.

The Library does not anticipate a need for any new library space or equipment to support the proposed Ed.D. program in educational technology. However, increased enrollment, more in-depth research, and new areas of emphasis will require more intensive librarian liaison time. There will also be an increased need for interlibrary loan support to distance students in this program. One small example of that is a recent request for interlibrary loan material from a student living in China.

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

Library costs are described in Section 6.d.(1).(a).

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

As stated in section 6.d.(1).(a) above, the Library has a strong interlibrary loan and acquisitions on-demand service in place to meet the needs of the faculty, students, and staff of the university for access to information resources not available in the Library or through current subscriptions. Materials can be, and are, routinely obtained and delivered electronically to almost any location in the world.

(2) Equipment/Instruments

Describe the 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.

The computer and internet bandwidth resources in place for the master's degree programs in educational technology are sufficient to meet the needs of the proposed Ed.D. program in educational technology.

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?

Funding for the proposed Ed.D. program in educational technology does not involve reallocation of existing state appropriated funds.

- (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.

An above MCO appropriation is not required to fund the proposed Ed.D. program in educational technology.

- (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?

The proposed Ed.D. program in educational technology is to be funded by self-support fees charged in accordance with Idaho State Board of Education policy V.R.3.b.v (as of September 2009). Most faculty and staff costs and all operating and capital costs of the Department of Educational Technology are funded through revenue generated by the department through its online degree programs. At present (spring semester 2011), the department consists of 12 full-time faculty members (9 tenured or tenure-track, 1 clinical faculty member, 1 visiting professor, and 1 instructor) and 7 administrative support staff members (4 full-time, 3 part-time). Four of the nine tenured or tenure-track faculty members are supported on appropriated faculty positions. A number of adjunct professors are paid on a per-course basis from semester to semester.



Section 6.a Instructional Staff Expenditures						
Year 1						
Name	Position and Rank	Annual Academic Year Salary	FTE Assignment to This Program	Program Salary	Projected Student Credits	FTE Students (24 credits per FTE)
Baek, Y K	Professor, Full	\$75,000	0.16	\$12,000	11	0.46
Dawley, L	Professor, Full	\$75,900	0.13	\$9,867	8	0.33
Hsu, Y-C	Professor, Assistant	\$53,000	0.13	\$6,890	4	0.17
Hung, A	Professor, Associate	\$53,500	0.13	\$6,955	4	0.17
Perkins, R	Professor, Associate	\$53,500	0.26	\$13,910	40	1.67
Rice, K	Professor, Associate	\$61,405	0.26	\$15,965	40	1.67
Schroeder, B	Clinical Faculty	\$57,300	0.00	\$0	0	0.00
Snelson, C	Professor, Associate	\$58,274	0.26	\$15,151	40	1.67
Wyzard, C	Professor, Full	\$64,890	0.26	\$16,871	40	1.67
Yang, D	Professor, Assistant	\$53,000	0.19	\$10,070	13	0.54
TBA	Professor, Assistant	\$53,000	0.13	\$6,890	4	0.17
		Per Course Sal	Equiv FTE	Prog Cost		
Flannelly, S	Adjunct Faculty	\$4,452	0.00	\$0	0	0.00
Freed, J	Adjunct Faculty	\$4,452	0.00	\$0	0	0.00
Gerstein, J	Adjunct Faculty	\$4,452	0.01	\$223	3	0.13
Gibson, D	Adjunct Faculty	\$5,500	0.01	\$367	3	0.13
Grey-Dove, T	Adjunct Faculty	\$4,452	0.00	\$0	0	0.00
Hall, K. D	Adjunct Faculty	\$4,452	0.00	\$0	0	0.00
Kaiser, L	Adjunct Faculty	\$2,733	0.00	\$0	0	0.00
Letourneau, T	Adjunct Faculty	\$4,452	0.00	\$0	0	0.00
Randall, A	Adjunct Faculty	\$4,452	0.00	\$0	0	0.00
Thompson, J	Adjunct Faculty	\$5,500	0.00	\$0	0	0.00
	SUBTOTALS	Tenure-Tr Fac	1.91	\$114,570		
		Clinical Faculty	0.00	\$0		
		Adjunct Faculty	0.02	\$589		
	TOTALS		1.93	\$115,159	210	8.75

Section 6.a Instructional Staff Expenditures						
Year 2						
Name	Position and Rank	Annual Academic Year Salary	FTE Assignment to This Program	Program Salary	Projected Student Credits	FTE Students (24 credits per FTE)
Baek, Y K	Professor, Full	\$76,500	0.15	\$11,475	12	0.50
Dawley, L	Professor, Full	\$77,418	0.26	\$20,129	48	2.00
Hsu, Y-C	Professor, Assistant	\$54,060	0.24	\$12,974	35	1.46
Hung, A	Professor, Associate	\$54,570	0.26	\$14,188	30	1.25
Perkins, R	Professor, Associate	\$54,570	0.37	\$20,191	80	3.33
Rice, K	Professor, Associate	\$62,633	0.15	\$9,395	8	0.33
Schroeder, B	Clinical Faculty	\$58,446	0.11	\$6,429	36	1.50
Snelson, C	Professor, Associate	\$59,439	0.26	\$15,454	44	1.83
Wyzard, C	Professor, Full	\$66,188	0.26	\$17,209	48	2.00
Yang, D	Professor, Assistant	\$54,060	0.26	\$14,056	44	1.83
TBA	Professor, Assistant	\$54,060	0.17	\$9,190	17	0.71
		Per Course Sal	Equiv FTE	Prog Cost		
Flannelly, S	Adjunct Faculty	\$4,541	0.00	\$0	0	0.00
Freed, J	Adjunct Faculty	\$4,541	0.00	\$0	0	0.00
Gerstein, J	Adjunct Faculty	\$4,541	0.00	\$0	0	0.00
Gibson, D	Adjunct Faculty	\$5,610	0.00	\$0	0	0.00
Grey-Dove, T	Adjunct Faculty	\$4,541	0.01	\$227	3	0.13
Hall, K. D	Adjunct Faculty	\$4,541	0.01	\$454	6	0.25
Kaiser, L	Adjunct Faculty	\$2,788	0.00	\$0	0	0.00
Letourneau, T	Adjunct Faculty	\$4,541	0.02	\$681	9	0.38
Randall, A	Adjunct Faculty	\$4,541	0.00	\$0	0	0.00
Thompson, J	Adjunct Faculty	\$5,610	0.00	\$0	0	0.00
	SUBTOTALS	Tenure-Tr Fac	2.38	\$144,261		
		Clinical Faculty	0.11	\$6,429		
		Adjunct Faculty	0.04	\$1,362		
	TOTALS		2.53	\$152,052	420	17.50

Section 6.a Instructional Staff Expenditures						
Year 3						
Name	Position and Rank	Annual Academic Year Salary	FTE Assignment to This Program	Program Salary	Projected Student Credits	FTE Students (24 credits per FTE)
Baek, Y K	Professor, Full	\$78,030	0.15	\$11,705	20	0.83
Dawley, L	Professor, Full	\$78,966	0.26	\$20,531	56	2.33
Hsu, Y-C	Professor, Assistant	\$55,141	0.24	\$13,234	39	1.63
Hung, A	Professor, Associate	\$55,661	0.26	\$14,472	34	1.42
Perkins, R	Professor, Associate	\$55,661	0.37	\$20,595	84	3.50
Rice, K	Professor, Associate	\$63,886	0.15	\$9,583	12	0.50
Schroeder, B	Clinical Faculty	\$59,615	0.13	\$7,750	36	1.50
Snelson, C	Professor, Associate	\$60,628	0.26	\$15,763	48	2.00
Wyzard, C	Professor, Full	\$67,512	0.26	\$17,553	52	2.17
Yang, D	Professor, Assistant	\$55,141	0.26	\$14,337	48	2.00
TBA	Professor, Assistant	\$55,141	0.29	\$15,991	57	2.38
		Per Course Sal	Equiv FTE	Prog Cost		
Flannelly, S	Adjunct Faculty	\$4,632	0.00	\$0	0	0.00
Freed, J	Adjunct Faculty	\$4,632	0.03	\$1,158	15	0.63
Gerstein, J	Adjunct Faculty	\$4,632	0.02	\$926	12	0.50
Gibson, D	Adjunct Faculty	\$5,722	0.00	\$0	0	0.00
Grey-Dove, T	Adjunct Faculty	\$4,632	0.01	\$232	3	0.13
Hall, K. D	Adjunct Faculty	\$4,632	0.01	\$463	6	0.25
Kaiser, L	Adjunct Faculty	\$2,843	0.02	\$427	9	0.38
Letourneau, T	Adjunct Faculty	\$4,632	0.02	\$695	9	0.38
Randall, A	Adjunct Faculty	\$4,632	0.02	\$695	9	0.38
Thompson, J	Adjunct Faculty	\$5,722	0.00	\$0	0	0.00
	SUBTOTALS	Tenure-Tr Fac	2.50	\$153,763		
		Clinical Faculty	0.13	\$7,750		
		Adjunct Faculty	0.13	\$4,595		
	TOTALS		2.76	\$166,108	549	22.88

## Section 6a. Administrative Support Personnel Expenditures

Year 1

Name	Position	Annual Rate (12-month)	FTE Assignment to This Program	Program Salary	PerCent of Salary to Program
Blakeslee, Kathie	Administrative Assistant	\$ 28,620	0.05	\$1,431	5.0%
Branson, Kellie	Manager, Student Outreach Services	\$ 52,000	0.05	\$2,600	5.0%
Capps, Joan	Administrative Assistant	\$ 25,000	0.05	\$1,250	5.0%
Castelin, Paul	Post-Admission Advisory Coordinator	\$ 41,932	0.00	\$0	0.0%
Conner, Dixie	Admissions Advisor	\$ 40,000	0.05	\$2,000	5.0%
Foster, Jerry	Program Admissions Coordinator	\$ 43,202	0.10	\$4,320	10.0%
Kringen, Elizabeth	Technical Records Specialist	\$ 24,000	0.05	\$1,200	5.0%
TBA	Graphic/Instructional Designer	\$ 45,000	0.05	\$2,250	5.0%
Year 1 Totals			0.40	\$15,051	

Year 2

Blakeslee, Kathie	Administrative Assistant	\$29,192	0.05	\$1,460	5.0%
Branson, Kellie	Manager, Student Outreach Services	\$53,040	0.05	\$2,652	5.0%
Capps, Joan	Administrative Assistant	\$25,500	0.10	\$2,550	10.0%
Castelin, Paul	Post-Admission Advisory Coordinator	\$42,771	0.05	\$2,139	5.0%
Conner, Dixie	Admissions Advisor	\$40,800	0.10	\$4,080	10.0%
Foster, Jerry	Program Admissions Coordinator	\$44,066	0.10	\$4,407	10.0%
Kringen, Elizabeth	Technical Records Specialist	\$24,480	0.10	\$2,448	10.0%
TBA	Graphic/Instructional Designer	\$45,900	0.10	\$4,590	10.0%
Year 2 Totals			0.65	\$24,325	

Year 3

Blakeslee, Kathie	Administrative Assistant	\$29,776	0.05	\$1,489	5.0%
Branson, Kellie	Manager, Student Outreach Services	\$54,101	0.05	\$2,705	5.0%
Capps, Joan	Administrative Assistant	\$26,010	0.10	\$2,601	10.0%
Castelin, Paul	Post-Admission Advisory Coordinator	\$43,626	0.05	\$2,181	5.0%
Conner, Dixie	Admissions Advisor	\$41,616	0.10	\$4,162	10.0%
Foster, Jerry	Program Admissions Coordinator	\$44,947	0.10	\$4,495	10.0%
Kringen, Elizabeth	Technical Records Specialist	\$24,970	0.15	\$3,745	15.0%
TBA	Graphic/Instructional Designer	\$46,818	0.20	\$9,364	20.0%
Year 3 Totals			0.80	\$30,742	

## Section 6.b Administrative Expenditures

## Year 1

Name	Position and Rank	Annual Contract Salary	FTE Assignment to This Program	Program Salary	PerCent of Salary to Program
Perkins, R	Graduate Prog Coord	\$53,500	0.20	\$10,700	20.0%
Rice, K	Chair	\$75,051	0.20	\$15,010	20.0%
Wyzard, C	Associate Chair	\$72,100	0.05	\$3,605	5.0%
Year 1 Subtotals			0.45	\$29,315	45.0%

## Year 2

Perkins, R	Graduate Prog Coord	\$54,570	0.20	\$10,914	20.0%
Rice, K	Chair	\$76,552	0.20	\$15,310	20.0%
Wyzard, C	Associate Chair	\$73,542	0.05	\$3,677	5.0%
Year 2 Subtotals			0.45	\$29,902	45.0%

## Year 3

Perkins, R	Graduate Prog Coord	\$55,661	0.20	\$11,132	20.0%
Rice, K	Chair	\$78,083	0.20	\$15,617	20.0%
Wyzard, C	Associate Chair	\$75,013	0.05	\$3,751	5.0%
Year 3 Subtotals			0.45	\$30,500	45.0%

## **APPENDIX A: External review report**

### **Site Visit Report**

Reviewing the proposal for  
**Doctor of Education in Educational Technology**  
**College of Education, Department of Educational Technology**  
**Boise State University**  
**Boise, Idaho**

Site visited occurred May 9-11, 2011

Site Visit Team:  
Dr. Sharon Smaldino, Northern Illinois University  
Dr. Linda Polin, Pepperdine University

**FINAL REPORT**  
**May 11, 2011**

## Executive Summary

After visiting with the program and college faculty, university administration, and students, we find the proposed program to be well designed, well documented, well resourced, carefully researched, and thoughtfully constructed. We offer several suggestions to improve implementation. We recognize the strength the program derives from the existing successful masters which lays the groundwork for a potential high-quality doctoral program. None of the recommendations offered herein preclude our endorsement of the program and its readiness to move forward in the process.

## II. Background and Mission

### Nature of the Request

This request is for a new doctoral program in the College of Education at Boise State University that will be offered online and lead to the degree of Doctor of Education (Ed.D.) in Educational Technology. The proposed program builds on many years of experience delivering both thesis-based and professional master's programs online through the Department of Educational Technology. These master's programs (Master of Educational Technology, and Master of Science in Educational Technology) and three associated graduate certificates provide advanced studies in the application of teaching and learning technologies. Areas of particular focus will include online teaching and learning, technology integration, academic technology leadership, innovative teaching in K-12 and higher education, educational software/web or mobile applications development, and educational games and simulations.

Because Boise State University already offers an Ed.D. program, the proposed program is unlikely to constitute a substantive change for the university as defined by Northwest Commission on Colleges and Universities (NWCCU) criteria. However, it is the NWCCU staff that makes the final determination of whether the creation of a particular program is a substantive change or merely a minor change. Once the program receives approval from the SBOE, Boise State University will follow standard protocol by sending a letter to the NWCCU describing the program, appending the approved full proposal, and requesting a decision regarding the proposed program. In the event that the NWCCU deems the creation of the program to be a substantive change, Boise State University will then prepare and submit the appropriate Substantive Change Proposal.

### Justification of Need

The proposed Ed.D. program in educational technology was developed in response to numerous requests from prospective students for an online doctoral program that generally examines the use of current and emerging technologies for effective and efficient teaching and learning in a dynamic, global society.

We believe that the doctorate is the logical conclusion of the Masters, especially enabling students to take a leadership role in site-based technology applications and integration to support K-20 learning outcomes.

### III. Section by Section Review of the Proposal

#### 1. Describe the Nature of the Request

This proposal has been developed in response to high demand from current students, Masters alumni, and prospective students for a completely “online doctoral program that examines the use of current and emerging technologies for efficient and effective teaching and learning in a dynamic global society.” They have recognized that current and recent students are looking for a doctoral degree to continue their educational technology studies. They have engaged in dialogue with those students about needs. This degree, as proposed, is designed to support practitioners in education, K-20, as opposed to a Ph.D. focused on academic research.

#### 2. Quality of the Proposed Program

**Regional Institutional Accreditation:** This proposal continues the vision of the Boise State University toward advancing its mission to become a premier urban research institution by expanding doctoral offerings.

**Specialized Accreditation:** The College of Education is an NCATE accredited college, re-accredited in 2010. The proposed program has mapped its curriculum to two Specialized Program Areas: Association for Educational Communications and Technology (AECT) and the International Society for Technology in Education (ISTE). They are also making use of *Quality Matters* as a touchstone for evaluation of online courses.

**Program Review:** There are plans for a five-year review process; however, we recommend an ongoing formative annual review of course content, student learning outcomes, program learning objectives, and procedures.

**Graduate College:** The proposal is clearly aligned with policies and procedures of the College of Education and the Graduate College regarding degree, certification, faculty governance.

**Department Processes:** Annual student evaluations and course evaluations are conducted. They have an ongoing evaluation of curriculum relative to state, national, and industry standards.

##### a. Curriculum

They have successfully completed the curriculum process for approval of new doctoral level courses for the core and research sections of the program.

##### Questions:

There are four research courses listed in the curriculum that appear to be the research electives (662, 663, 671, 672). How frequently will these be offered in the sequence for an online program? Are there alternative doctoral level electives students might take advantage of in other programs? Are there prerequisites for the research elective?

In the area of electives, we wonder how are electives selected and what advising procedures will be in place to address students’ selections.

##### Recommendations:



For the cognate, we recommend the program establish a menu of complimentary courses as areas of emphasis, e.g. leadership, or change, to support a cohesive experience relevant to career goals, and to ease scheduling matters. We also encourage collaboration with other program areas, e.g., CIFS, which we realize necessitates the transition of course delivery to an online format but which we believe further strengthens both programs.

For the Innovation Internship, we recommend the program continue its work with partners to establish opportunities for student development and faculty research.

For electives, we recommend faculty work collaboratively with colleagues in other programs to expand the offerings beyond “educational technology” courses.

We recommend that the faculty revisit the existing core to integrate multicultural issues relevant to national diversity, e.g., cultural, linguistic, economic, ethnic, urban/rural, among others. The current Global and Cultural Perspectives course only references issues outside the United States.

#### b. Faculty

The proposed program faculty offers an impressive array of expertise. We are somewhat concerned that five assistant professors will need to be mentored and supported in their quest for promotion and tenure, e.g., in balancing load, research opportunities, and program responsibilities.

#### c. Students

We commend the clearly described target population for the program. We note the absence of articulated criteria for admission to the program.

#### d. Infrastructure Support

*Personnel.* Faculty listed are appropriate to the program curriculum. Staff are in place and have experience with distance students. We commend the single point of contact for distance students and streamlined workflow for paperwork. The Writing Center already operates to support online students. We recommend the expansion of statistical support for the additional doctoral level studies. It may be this additional support can be shared across other departments and programs.

*Graduate Assistants.* The program will be able to make use of the existing structure for supporting graduate assistants.

*Library.* The BSU Albertsons Library is already organized to support students across multiple time zones and countries with online resources and assistance and inter-library loan. The program budget includes sufficient support to expand holdings and services to the doctoral program.

*Equipment.* We recognize the department is self-sufficient in supporting technology equipment and services, however we recommend exploration of college and university level technology support. This has three advantages: to standardize technology infrastructures, find support for new technologies, leverage university resources allowing faculty to focus on program matters.

#### e. Future Plans

We commend the self-support status of the proposed plan, built upon the successful self-support strategy of the masters. However, given the vagaries of the current economic environment, we recommend the program establish and maintain a “rainy day” reserve based on a strong, clearly articulated rationale for this reserve.

#### 3. Duplication

In examining the differences in the nature of the program, the differences in content, and mode of delivery, we commend the due diligence shown in the proposal's investigation of state and regional competitors. We find the proposed program a realistic offering in the context of this setting. It is represented as the only online doctoral degree available in the region in education technology.

#### 4. Centrality

We note the proposed program aligns with BSU Central Institutional Role and Mission to function as a comprehensive urban institution serving a diverse population in Idaho. It expands the variety of programs and incorporates a variety of delivery methods to address the public responsibility of the university.

The proposed program clearly enhances the department's efforts to align its plan with the ten goals of the BSU strategic mission, "Charting the Course."

We commend the response to **educational needs of the region**.

We recognize the strength of **partnerships and outreach**, and recommend the establishment of an EdTech Advisory Board serving both the existing masters and proposed doctoral programs.

We encourage consideration of the **teaching and research opportunities** presented through partnerships and collaborations with external partners. It is important to ensure that new, untenured, faculty capitalize on research opportunities in these settings.

We commend the global perspective included in the core courses of the program, and have recommended attention to **diverse communities** within the nation as well (linguistic, economic, ethnic, cultural).

The department has an existing exemplary **student-centered support** structure and is well aware of the special needs of distance students. We recommend the establishment of a policy or procedure for dealing with students who present academic and professional concerns.

The existing masters program has demonstrated **responsiveness to change** in educational practice. The proposed doctoral program includes flexibility in the curriculum sufficient to be responsive to changing technologies and policies in education.

We recommend consideration of extending the **diversity of the incoming student body** to better reflect the diversity of the nation since the program serves not just the region, but the nation and the world.

To **recruit and retain academically prepared faculty** we recommend careful attention to the support and mentoring needs of assistant level professors with regard to research, sponsored funding, and advancement of teaching skills.

We commend the department for its existing **fiscal resources** of a self-support budgeting structure, and have suggested elsewhere in this report that the department consider ways to leverage their funds, e.g., by integrating technology services with the university/college and establishing a reserve fund.

The motivation of the faculty is to build and extend an **attractive and accessible online environment**, e.g., in Second Life.

#### 5. Demand

a. Needs Assessment. The proposal committee conducted a survey of existing students, examined Idaho Department of Labor areas of employment potential, compiled information from inquiries of

prospective students, and enumerated benefits to the state and region. They concluded it was appropriate to establish an online doctoral degree in educational technology to meet these needs.

b. Students. The proposed program targets mid-career professionals seeking part-time online advanced study. They have considered the capacity for the program under proposed conditions and have set a reasonable enrollment cap.

c. Expansion or Extension. The program builds upon a successful, nationally recognized masters program and offers a logical extension in through the doctoral program.

#### 6. Resources

The proposed appears to have adequate resources for operations over the proposed three-year period.

### IV Summary, Commendations, and Recommendations

#### A. The visiting team met with several university groups.

Interim Provost and Vice President of Academic Affairs and Associate Dean for the College of Education expressed support and enthusiasm for the proposed program.

Deans of the College of Education, Extended Studies, Library, and Graduate College; and the Vice Provost of Academic Planning acknowledged their readiness to support the proposed doctoral program with necessary resources from across the university.

College of Education CIFS Program Faculty expressed support for the proposed program and expressed interest in collaborating in course offerings and creating doctoral level policies and procedures, and serving on doctoral dissertation committees.

Program Faculty and Staff were enthusiastic, and appeared to have all collaborated in the development of the proposal. They recognized the nature of start-up ventures and were preparing to deal with contingencies.

External Partners included the Idaho Virtual Academy, State Department representatives from the Educational Technology Department, and the Connections Academy, a public charter school organization serving Idaho. Partners all expressed excitement and support and contributed suggestions and ideas for the internship and research opportunities. Partners discussed interest in serving in an advisory capacity to the program.

Current students, alumni, and prospective students met both face to face and virtually as a group to describe their interest and motivation for advanced study in educational technology. Most said they would be unable to participate in doctoral study unless it was available as an online option. When queried about their prior program experiences, the current and recent graduates of the masters program described deep intellectual engagement, and satisfaction with coursework and faculty support.

#### B. Commendations

1. Close alignment of proposed degree with University, College, and Department goals.
2. Broad and deep university support for the proposed program.
3. Clear evidence of student demand.
4. Strong self-support fiscal plan.

5. Extensive history of successful online masters program.
6. Quality faculty with relevant experience and diverse expertise.
7. Initiation and support of a Graduate Student Association to extend the connections among students and with the institution.

**C. Recommendations**

1. Develop an external advisory committee for the edtech programs.
2. Develop a doctoral committee to align policies and procedures across doctoral programs in the College of Education.
3. Develop and elaborate plans for electives and cognate courses to ensure cohesiveness.
4. Ensure support for new faculty for tenure and promotion.
5. Define a set of admission criteria for the program.
6. Consider university and college role in supporting technology infrastructure for the program.
7. Establish and maintain a fiscal reserve to ensure the sustainability of the program in the face of economic strain.

**Final Conclusion**

None of the recommendations preclude our endorsement of the program and its readiness to move forward in the process.

# **APPENDIX B:**

## **Department Response to External review report**

**Response  
to  
Site Visit Report**  
Reviewing the proposal for  
Doctor of Education in Educational Technology

Department of Educational Technology  
College of Education  
Boise State University  
Boise, Idaho

Site visited occurred May 9 - 11, 2011

Site Visit Team:  
Dr. Sharon Smaldino, Northern Illinois University  
Dr. Linda Polin, Pepperdine University

**RESPONSE**  
**by the Department of Educational Technology**

**June 2, 2011**

### Summary of Responses for the External Review

The final conclusion of the reviewers was: “None of the recommendations preclude our endorsement of the program and its readiness to move forward in the process.” What follows is a summary of our responses to specific concerns enumerated by the external review committee. The narrative of the responses is found in pertinent areas of the full review report.

1. “Develop an external advisory committee for the edtech programs.”

*Response:*

- *We will maintain current partnerships with state, national, and international agencies or organizations that have an educational technology focus.*
- *An advisory committee composed of approximately six members representing our various partners will be established. One student will also serve on the panel.*
- *The advisory panel’s primary role will be to offer feedback and guidance about program considerations, as well as to help create authentic experiences for our students in the internship and dissertation experiences.*

2. “Develop a doctoral committee to align policies and procedures across doctoral programs in the College of Education.”

*Response:*

- *A doctoral committee will be established; it will have at least two members besides the committee chairperson.*
- *The primary purpose of the committee will be to align policies and procedures across doctoral programs in the College of Education.*

3. “Develop and elaborate plans for electives and cognate courses to ensure cohesiveness.”

*Response:*

- *The sequence of elective and cognate courses will be carefully planned before students matriculate into the doctoral program.*
- *Students will plan cognate and elective courses with their advisor.*
- *The transfer of external courses will be reviewed by the graduate program coordinator.*
- *We will work with other departments to ensure efficiency (ex., cross-listing of courses)*

4. “Ensure support for new faculty for tenure and promotion.”

*Response:*

- *All faculty members in the department will be mentored by a more senior faculty member within the college with respect to doctoral student advisement.*
- *Changes to workload expectations will be commensurate with faculty responsibilities related to scholarly production, teaching/advising, and service.*
- *An annual review of all faculty by the chair and associate chair helps to ensure progress toward promotion.*

5. “Define a set of admission criteria for the program.”

*Response:*

- *A draft of the Doctoral Student Handbook is in development (to be finalized by early Fall 2011).*
- *The handbook will include a set of admission criteria which will be based on existing criteria of the Graduate College and the Ed.D. program in Curriculum, Instruction, and Foundational Studies (CIFS).*

- *Criteria will include minimum scores on the standardized tests, an entry essay, evidence of writing scholarship, strong external recommendations, and possibly an interview (conducted at a distance).*

6. "Consider university and college role in supporting technology infrastructure for the program."

*Response:*

- *The department has a good working relationship with college and university-level technology support personnel.*
- *We are committed to looking for the greatest efficacy and efficiency in technology infrastructure. At times this means working within the university, and at others it means outsourcing services.*
- *Departmental-level servers (for storing student work) are maintained in part by college tech staff.*

7. "Establish and maintain a fiscal reserve to ensure the sustainability of the program in the face of economic strain."

*Response:*

- *The department currently holds 10% of its overall revenue in reserve; carryforward fluctuates annually in relation to revenues and expenses*
- *The amount held in reserve provides a base to cover the cost of employee contracts in the event of a decline in enrollment in any given fiscal year.*
- *We conduct a regular examination of program obligations, seeking to ensure that all aspects of the department's financial considerations align with needs.*

## Executive Summary

After visiting with the program and college faculty, university administration, and students, we find the proposed program to be well designed, well documented, well resourced, carefully researched, and thoughtfully constructed. We offer several suggestions to improve implementation. We recognize the strength the program derives from the existing successful masters which lays the groundwork for a potential high-quality doctoral program. None of the recommendations offered herein preclude our endorsement of the program and its readiness to move forward in the process.

*Response:*

*The faculty and staff of the Department of Educational Technology at Boise State University (hereafter referred to as EdTech) would like to begin our response section by first stating our gratitude for the open, honest, and collegial nature of the external reviewers. Dr. Polin and Dr. Smaldino listened well, asked important questions, and shared valuable insights from their own doctoral programs and others of which they are aware. The process of the external review helped give our department confidence going forward, but also presented us with critical considerations. We thank them for their work.*

*We address the reviewers' recommendations, suggestions, and concerns below the sections in which they appear. Such issues have been underlined, and all of our own responses, like these two paragraphs, will be indented and italicized. Our responses are also numbered for ease of reference.*



## II. Background and Mission

### Nature of the Request

This request is for a new doctoral program in the College of Education at Boise State University that will be offered online and lead to the degree of Doctor of Education (Ed.D.) in Educational Technology. The proposed program builds on many years of experience delivering both thesis-based and professional master's programs online through the Department of Educational Technology. These master's programs (Master of Educational Technology, and Master of Science in Educational Technology) and three associated graduate certificates provide advanced studies in the application of teaching and learning technologies. Areas of particular focus will include online teaching and learning, technology integration, academic technology leadership, innovative teaching in K-12 and higher education, educational software/web or mobile applications development, and educational games and simulations.

Because Boise State University already offers an Ed.D. program, the proposed program is unlikely to constitute a substantive change for the university as defined by Northwest Commission on Colleges and Universities (NWCCU) criteria. However, it is the NWCCU staff that makes the final determination of whether the creation of a particular program is a substantive change or merely a minor change. Once the program receives approval from the SBOE, Boise State University will follow standard protocol by sending a letter to the NWCCU describing the program, appending the approved full proposal, and requesting a decision regarding the proposed program. In the event that the NWCCU deems the creation of the program to be a substantive change, Boise State University will then prepare and submit the appropriate Substantive Change Proposal.

### Justification of Need

The proposed Ed.D. program in educational technology was developed in response to numerous requests from prospective students for an online doctoral program that generally examines the use of current and emerging technologies for effective and efficient teaching and learning in a dynamic, global society.

We believe that the doctorate is the logical conclusion of the Masters, especially enabling students to take a leadership role in site-based technology applications and integration to support K-20 learning outcomes.

### III. Section by Section Review of the Proposal

#### 1. Describe the Nature of the Request

This proposal has been developed in response to high demand from current students, Masters alumni, and prospective students for a completely “online doctoral program that examines the use of current and emerging technologies for efficient and effective teaching and learning in a dynamic global society.” They have recognized that current and recent students are looking for a doctoral degree to continue their educational technology studies. They have engaged in dialogue with those students about needs. This degree, as proposed, is designed to support practitioners in education, K-20, as opposed to a Ph.D. focused on academic research.

#### 2. Quality of the Proposed Program

**Regional Institutional Accreditation:** This proposal continues the vision of the Boise State University toward advancing its mission to become a premier urban research institution by expanding doctoral offerings.

**Specialized Accreditation:** The College of Education is an NCATE accredited college, re-accredited in 2010. The proposed program has mapped its curriculum to two Specialized Program Areas: Association for Educational Communications and Technology (AECT) and the International Society for Technology in Education (ISTE). They are also making use of *Quality Matters* as a touchstone for evaluation of online courses.

**Program Review:** There are plans for a five-year review process; however, we recommend an ongoing formative annual review of course content, student learning outcomes, program learning objectives, and procedures.

#### *Response:*

- *The EdTech program currently uses an annual strategic planning consisting of a department day-long meeting at the beginning of each semester to review programmatic data including, but not limited to, course evaluations, graduate surveys, and graduation and enrollment data. Program goals and objectives are established, area of responsibilities and timelines are assigned. We also recently completed a program review, creating a curriculum matrix that drives our programmatic outcomes.*
- *Starting with the faculty retreat in August 2011, EdTech will form a departmental doctoral committee that will serve the purpose of oversight of the Ed.D. program, as well as to develop policy recommendations that will be put before the faculty as a whole. Doctoral committee members will work alongside the already existing Curriculum Committee to ensure review of course content, and learning objectives and outcomes.*

**Graduate College:** The proposal is clearly aligned with policies and procedures of the College of Education and the Graduate College regarding degree, certification, faculty governance.

**Department Processes:** Annual student evaluations and course evaluations are conducted. They have an ongoing evaluation of curriculum relative to state, national, and industry standards.

#### a. Curriculum

They have successfully completed the curriculum process for approval of new doctoral level courses for the core and research sections of the program.

#### Questions:

There are four research courses listed in the curriculum that appear to be the research electives (662, 663, 671, 672). How frequently will these be offered in the sequence for an online program? Are there alternative doctoral level electives students might take advantage of in other programs? Are there prerequisites for the research elective?

*Response:*

- *We absolutely agree that the sequence of courses is important. Given our many years of experience with the master's degree program, and because we are a self-support program that must judiciously plan all of its offerings, we recognize the need for careful and strategic course planning. The timing of our course offerings will be clearly articulated well in advance of the start of the Ed.D.*
- *All electives will be selected as a student consults with his or her advisor. Should other departments within the College of Education offer online courses (e.g., Literacy, or Special Education), students are of course free to take them. Doctoral students will be made aware of electives offered through other departments at the university (e.g., Instructional Technology & Performance). Students are able to take courses offered at other universities that can serve as either electives or as replacements for mandated courses (if approved by the doctoral program committee). However, the transfer of these credits will be subject to the established policy of the Graduate College, which allows the transfer of no more than 1/3 of total credits.*
- *The proposed Ed.D. curriculum as approved by the Graduate College Curriculum Committee lists the prerequisites for required research courses. The prerequisites will not be explained here to avoid redundancy, but we do expect the required research courses to build upon one another that leads a student toward an appropriate level of expertise in quantitative and qualitative data collection, analysis, and reporting. Thus, a number of prerequisites are in place to ensure this.*

In the area of electives, we wonder how are electives selected and what advising procedures will be in place to address students' selections.

*Response:*

- *We concur that careful advising guidelines are needed as they relate to a host of issues, including the development of the student's plan of study. EdTech already has in place for both master's degree a document known as the "Program Development Form" (PDF). This form, which is completed, prior to admission clearly establishes the courses to be taken and when. The PDF is not a document that "locks" a student in to a certain sequence, but provides a basis for advising as she or he goes along. All advising procedures have not at this point (Spring 2011) been fully established, but will be addressed in fall 2011, ahead of any student enrollments.*

## Recommendations:

For the cognate, we recommend the program establish a menu of complimentary courses as areas of emphasis, e.g. leadership, or change, to support a cohesive experience relevant to career goals, and to ease scheduling matters. We also encourage collaboration with other program areas, e.g., CIFS, which we realize necessitates the transition of course delivery to an online format but which we believe further strengthens both programs.

*Response:*

- *A "menu" approach to the cognate (area of emphasis) is a point well taken. We in fact do this now with our graduate certificate offerings, which each have a specific three course sequence. The EdTech faculty will take this recommendation into consideration during its fall 2011 retreat; it is likely to adopt some version of it due to our experience with the certificates. We are very strongly committed to ensuring that all program experiences are closely aligned to student career goals, and will therefore strive to provide them with the options they need to become expert practitioners in the field. As noted previously, we are aware of scheduling concerns and the note by the reviewers serves as a good reminder to address the issue in these terms.*
- *As other departments in the College of Education begin to offer online versions of courses such as Literacy and Special Education, we have started cross-listing them as electives in our current Master's program. Many of our colleagues in the Department of Curriculum, Instruction, and Foundational Studies (CIFS) have been encouraging through the process of this proposal. Some have expressed an interest in teaching courses online. Any who endeavor to create web-based courses will find support*

*from within EdTech to the degree we can offer it, but they also have a number of people within the university's Center for Teaching and Learning, as well as its Office of Academic Technologies and Office of Distance Education to support the transformation and/or development of any online courses. We look forward to working with any CIFS colleagues who wish to explore this opportunity not only for the purpose of extending course offerings to our students, but to broaden their own outreach as well.*

For the Innovation Internship, we recommend the program continue its work with partners to establish opportunities for student development and faculty research.

*Response:*

- *We strongly agree with this recommendation. EdTech has every intention of continuing our strong partnerships with local (e.g., Idaho Digital Learning Academy, IETA, State Dept. of Education and others), national (International Association of K12 Online Learning), and international (Association of Educational Communications & Technology, International Society for Technology in Education, National University of Tainan, Korea National University of Education) organizations. As the Ed.D. program develops, we will look at those partnerships as a way to provide both students and faculty with opportunities for development and research.*

For electives, we recommend faculty work collaboratively with colleagues in other programs to expand the offerings beyond “educational technology” courses.

*Response:*

- *We concur with this recommendation. We address this issue in response #3.*

We recommend that the faculty revisit the existing core to integrate multicultural issues relevant to national diversity, e.g., cultural, linguistic, economic, ethnic, urban/rural, among others. The current Global and Cultural Perspectives course only references issues outside the United States.

*Response:*

- *This recommendation is duly noted. EdTech is one of the most diverse group of faculty and students on campus, and this should be fully reflected throughout our curriculum. The department is fully committed to issues of equality and justice and we try to express this, as appropriate, in all of the courses we teach. The full curriculum for this particular course has not yet been developed. When it is, the designer will ensure that local and national issues are addressed. Other core courses in the Ed.D. program besides the one mentioned (EDTECH 603) will integrate issues related to diversity and multiculturalism as impacted, influenced, and ameliorated by educational technologies.*

#### b. Faculty

The proposed program faculty offers an impressive array of expertise. We are somewhat concerned that five assistant professors will need to be mentored and supported in their quest for promotion and tenure, e.g., in balancing load, research opportunities, and program responsibilities.

*Response:*

- *We share the same concern as the reviewers as it relates to mentoring and balancing the work load of those tenure-track professors who are seeking promotion and tenure.*
- *As Boise State itself moves from a “teaching institution” toward one with a higher research profile, this concern is felt throughout the College of Education and by others at the university. How the concerns are addresses, at least at the department level, depends a good deal on a commitment by the doctoral committee and departmental leadership to ensure that policies and expectations align with the goal of helping faculty succeed at many levels.*
- *We would like to note that should the Ed.D. program begin in Fall 2012, and provided that two members currently seeking tenure achieve it in Spring 2012, there would be only two assistant professors in the program. The third professor, who has yet to be hired, may well be brought in at the*

*associate level given departmental needs and recognizing that experienced personnel are needed. At the time the new program begins, full-time faculty in the department will include three full professors, four associate professors, two assistant professors, a visiting professor, a clinical professor and a special lecturer (and a number of very qualified adjuncts who teach in the master's degree programs).*

#### c. Students

We commend the clearly described target population for the program. We note the absence of articulated criteria for admission to the program.

#### *Response:*

- *The materials used by the reviewers in Spring 2011 did not include documents currently in draft form. Among these is the “Ed.D. in Educational Technology Handbook.” An entire section of the handbook articulates the criteria for admission. In brief, there are two parts. Part One is the application to the Graduate College, which follows current policy. Part Two is the application to the department (which can be done concurrently). As with the current Ed.D. offered by the College of Education, the departmental application requires students to complete a letter of application, provide documentation of her or his ability to write a scholarly piece, and provide external references. The exact nature of the departmental application, and procedures for selecting students, have yet to be confirmed. All such materials will be developed by the department’s doctoral committee, discussed and voted on by the EdTech faculty, and presented to the College doctoral committee for advice and input. As with other aspects of the program, these admissions criteria and procedures will be developed and confirmed well in advance of the start of the program.*

#### d. Infrastructure Support

*Personnel.* Faculty listed are appropriate to the program curriculum. Staff are in place and have experience with distance students. We commend the single point of contact for distance students and streamlined workflow for paperwork. The Writing Center already operates to support online students. We recommend the expansion of statistical support for the additional doctoral level studies. It may be this additional support can be shared across other departments and programs.

#### *Response:*

- *We fully support the recommendation to expand advising for research – both for quantitative studies, as well as for qualitative inquiry. Careful academic investigation absolutely requires the advice and critical feedback by established experts. The department has a number of faculty who can advise in this manner (for example, one new faculty member has for many years worked with a national statistical institute in South Korea, another has a graduate certificate in statistical analysis, and a third is recognized expert in the field of data mining and quantitative analysis). However, these faculty have their own advisees and due to other research, teaching, and service obligations will not be able to advise everyone. Therefore, in agreement with the reviewers, we would very much like to see college or university-wide support structure in place not only for the benefit of our students, but all students involved in research at Boise State. Due to the distributed nature of our program, one distinct possibility is to hire adjunct faculty who are experts in this field who live elsewhere and who interact with students at a distance. One can well imagine an expert in phenomenological researcher living in Louisiana who is contracted with the university on a “retainer,” and who provides service for a certain number of hours per semester.*

*Graduate Assistants.* The program will be able to make use of the existing structure for supporting graduate assistants.

*Library.* The BSU Albertsons Library is already organized to support students across multiple time zones and countries with online resources and assistance and inter-library loan. The program budget includes sufficient

support to expand holdings and services to the doctoral program.

*Equipment.* We recognize the department is self-sufficient in supporting technology equipment and services, however we recommend exploration of college and university level technology support. This has three advantages: to standardize technology infrastructures, find support for new technologies, leverage university resources allowing faculty to focus on program matters.

*Response:*

- *We concur. Our plan is to look for efficiencies across the college and university with regard to technology use. There are times, however, when the department must use department specific tools, such as is the case with Moodle, our learning management system. Though the university pays for an annual license for BlackBoard, we have not found it to be flexible enough for the needs of students or faculty. Since it is imperative that we demonstrate “best practices” of distance education, we have to occasionally look outside the current support structure.*

#### e. Future Plans

We commend the self-support status of the proposed plan, built upon the successful self-support strategy of the masters. However, given the vagaries of the current economic environment, we recommend the program establish and maintain a “rainy day” reserve based on a strong, clearly articulated rationale for this reserve.

*Response:*

- *EDTECH currently holds approximately 10% of its overall revenue in reserve, with the overall amount of carryforward fluctuating annually in relation to revenues and expenses. This amount provides a base to cover the cost of employee contracts in the event of enrollment declines within any given fiscal year. It is critical that we do so for the “vagaries” noted by the reviewers. There are too many important aspects at stake if, for whatever reason, this was drawn down. As we examine program fees and costs, we will ensure that the reserve stays at its current level, and possibly look to increase it should circumstances dictate.*

### 3. Duplication

In examining the differences in the nature of the program, the differences in content, and mode of delivery, we commend the due diligence shown in the proposal’s investigation of state and regional competitors. We find the proposed program a realistic offering in the context of this setting. It is represented as the only online doctoral degree available in the region in education technology.

### 4. Centrality

We note the proposed program aligns with BSU Central Institutional Role and Mission to function as a comprehensive urban institution serving a diverse population in Idaho. It expands the variety of programs and incorporates a variety of delivery methods to address the public responsibility of the university.

The proposed program clearly enhances the department’s efforts to align its plan with the ten goals of the BSU strategic mission, “Charting the Course.”

We commend the response to **educational needs of the region.**

We recognize the strength of **partnerships and outreach**, and recommend the establishment of an EdTech Advisory Board serving both the existing masters and proposed doctoral programs.

*Response:*

- *This recommendation is one that we will seriously explore. We already have strong partnerships (as noted in #8), but forming an advisory team from those organizations could certainly strengthen our ability to meet our programmatic goals. One immediate idea may be to simply draw together a group*

*of five to six people, to include those working at the state level, those involved in technology integration at the district level, administration from K12 online academies, national technology organizations, and partner universities to meet at least once yearly to discuss issues related to research, trends, and so on. It would also be useful to have a doctoral student serve on this panel.*

We encourage consideration of the **teaching and research opportunities** presented through partnerships and collaborations with external partners. It is important to ensure that new, untenured, faculty capitalize on research opportunities in these settings.

*Response:*

- *We agree. This has been addressed in responses #8, #17.*

We commend the global perspective included in the core courses of the program, and have recommended attention to **diverse communities** within the nation as well (linguistic, economic, ethnic, cultural).

*Response:*

- *We agree with this recommendation, and address it in #10*

The department has an existing exemplary **student-centered support** structure and is well aware of the special needs of distance students. We recommend the establishment of a policy or procedure for dealing with students who present academic and professional concerns.

*Response:*

- *We concur. The department currently follows the guidelines as provided in BSU Code of Conduct and BSU Values Statement with all employees and students. These documents are also shared with students upon admission to the program, and students sign a form acknowledging receipt. Starting with the fall 2011 department retreat, the faculty will examine policies and procedures from various graduate programs that allow us to best support student development. The “disposition levels” as described by Dr. Smaldino is one very interesting possibility. The department is keen to share this conversation with the college doctoral committee, as we feel that a college-wide policy about how to deal with students of concern is most appropriate. The doctoral program coordinator with colleagues from other college departments and administrators on this initiative.*

The existing masters program has demonstrated **responsiveness to change** in educational practice. The proposed doctoral program includes flexibility in the curriculum sufficient to be responsive to changing technologies and policies in education.

We recommend consideration of extending the **diversity of the incoming student body** to better reflect the diversity of the nation since the program serves not just the region, but the nation and the world.

*Response:*

- *We agree with this recommendation. Currently, the students within the master’s degree programs at Boise State are more diverse than the population of the campus. The distributed nature of the program allows us to recruit students from places not well served by a campus in Idaho. As an example, here is a comparison chart of student ethnicity between CIFS and EdTech. These data show percentages of the different ethnicities enrolled in graduate classes from Fall 2006 - Spring 2011. The data were retrieved from the BSU Data Warehouse.*

ETHNICITY	CIFS	EDTECH
American Indian/Alaska Native	0.22%	0.20%
Asian	1.30%	1.77%
Black/African American	0.36%	0.91%
Hispanic/Latino	2.31%	2.70%
Native Hawaiian/Other Pacific Islander	0.18%	0.02%
No Race/Ethnicity Reported	24.66%	11.75%
Two or More Races	0.03%	0.00%
White	70.94%	82.66%

Additionally, our recent partnerships with National University of Tainan and Korea National University will continue development of our diverse student body.

To **recruit and retain academically prepared faculty** we recommend careful attention to the support and mentoring needs of assistant level professors with regard to research, sponsored funding, and advancement of teaching skills.

*Response:*

- *We agree with this recommendation. The fall faculty workload planning process and the annual review process for all department faculty (conducted by either the chair or associate chair) serves as a summative review of work, but also a formative piece for helping give faculty the resources they need to extend teaching and research skills. A healthy level of research funding per year affords each faculty member with the ability to start pilot projects, buy research software, travel to professional conferences, and attend seminars.*

We commend the department for its existing **fiscal resources** of a self-support budgeting structure, and have suggested elsewhere in this report that the department consider ways to leverage their funds, e.g., by integrating technology services with the university/college and establishing a reserve fund.

*Response:*

- *We agree with this recommendation and address it in response #15 and #16*

The motivation of the faculty is to build and extend an **attractive and accessible online environment**, e.g., in Second Life.

## 5. Demand

a. Needs Assessment. The proposal committee conducted a survey of existing students, examined Idaho Department of Labor areas of employment potential, compiled information from inquiries of prospective students, and enumerated benefits to the state and region. They concluded it was appropriate to establish an online doctoral degree in educational technology to meet these needs.

b. Students. The proposed program targets mid-career professionals seeking part-time online advanced study. They have considered the capacity for the program under proposed conditions and have set a reasonable enrollment cap.

c. Expansion or Extension. The program builds upon a successful, nationally recognized master's program and offers a logical extension in through the doctoral program.

## 6. Resources

The proposed appears to have adequate resources for operations over the proposed three-year period.



#### IV. Summary commendations and Recommendations

A. The visiting team met with several university groups.

Interim Provost and Vice President of Academic Affairs and Associate Dean for the College of Education expressed support and enthusiasm for the proposed program.

Deans of the College of Education, Extended Studies, Library, and Graduate College; and the Vice Provost of Academic Planning acknowledged their readiness to support the proposed doctoral program with necessary resources from across the university.

College of Education CIFS Program Faculty expressed support for the proposed program and expressed interest in collaborating in course offerings and creating doctoral level policies and procedures, and serving on doctoral dissertation committees.

Program Faculty and Staff were enthusiastic, and appeared to have all collaborated in the development of the proposal. They recognized the nature of start-up ventures and were preparing to deal with contingencies.

External Partners included the Idaho Virtual Academy, State Department representatives from the Educational Technology Department, and the Connections Academy, a public charter school organization serving Idaho. Partners all expressed excitement and support and contributed suggestions and ideas for the internship and research opportunities. Partners discussed interest in serving in an advisory capacity to the program.

*Response:*

- *We wish to note that though we have a partnership with the Idaho Virtual Academy (IDVA, a public charter school that uses K12, Inc. curriculum), the reviewers actually met colleagues from the state-sponsored Idaho Digital Learning Academy (IDLA), with whom we have developed a close working relationship over many years. The names of these two distinctly separate organizations are frequently confused, even within Idaho.*

Current students, alumni, and prospective students met both face to face and virtually as a group to describe their interest and motivation for advanced study in educational technology. Most said they would be unable to participate in doctoral study unless it was available as an online option. When queried about their prior program experiences, the current and recent graduates of the masters program described deep intellectual engagement, and satisfaction with coursework and faculty support.

B. Commendations

1. Close alignment of proposed degree with University, College, and Department goals.
2. Broad and deep university support for the proposed program.
3. Clear evidence of student demand.
4. Strong self-support fiscal plan.
5. Extensive history of successful online masters program.
6. Quality faculty with relevant experience and diverse expertise.
7. Initiation and support of a Graduate Student Association to extend the connections among students and with the institution.

**C. Recommendations**

*Response: These are addressed at the beginning of this document*

1. Develop an external advisory committee for the edtech programs.
2. Develop a doctoral committee to align policies and procedures across doctoral programs in the College of Education.
3. Develop and elaborate plans for electives and cognate courses to ensure cohesiveness.
4. Ensure support for new faculty for tenure and promotion.
5. Define a set of admission criteria for the program.
6. Consider university and college role in supporting technology infrastructure for the program.
7. Establish and maintain a fiscal reserve to ensure the sustainability of the program in the face of economic strain.

**Final Conclusion**

None of the recommendations preclude our endorsement of the program and its readiness to move forward in the process.

## APPENDIX C

### Graduate Courses in Educational Technology

THIS DOCUMENT IS FOR INTERNAL USE BY EDTECH FACULTY, INSTRUCTORS, AND STAFF.

Boise State University, Department of Educational Technology

# Curriculum Mapping Report

EDTECH Curriculum Committee 2010/2011

Chareen Snelson, Kerry Rice, Andy Hung, Yu-Chang Hsu, Dazhi Yang

Prepared Spring 2011

Updated: April 6

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## Introduction and Goals

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The EDTECH Curriculum Committee developed the Curriculum Mapping Report to provide a summary of current content, assignments, and technologies taught within the program.

The primary goals of the curriculum mapping process centered on identification of:

- ☐ content themes found across the courses in the EDTECH program;
- ☐ how and where AECT standards are met across courses in the program;
- ☐ technologies taught within EDTECH courses and level of estimated mastery students should achieve;
- ☐ course objectives;
- ☐ possible gaps or areas of overlap in course content and implications of that discovery;
- ☐ potential need for new courses or updates to existing courses to improve the overall program.

The information synthesized within this report was obtained from:

- ☐ a curriculum survey completed online by instructors during the fall 2010 semester;
- ☐ analysis of course syllabi linked from the EDTECH website at: <http://edtech.boisestate.edu/web/courses.htm>;
- ☐ feedback obtained by EDTECH faculty (n February 2011) after reviewing the first draft of the report.

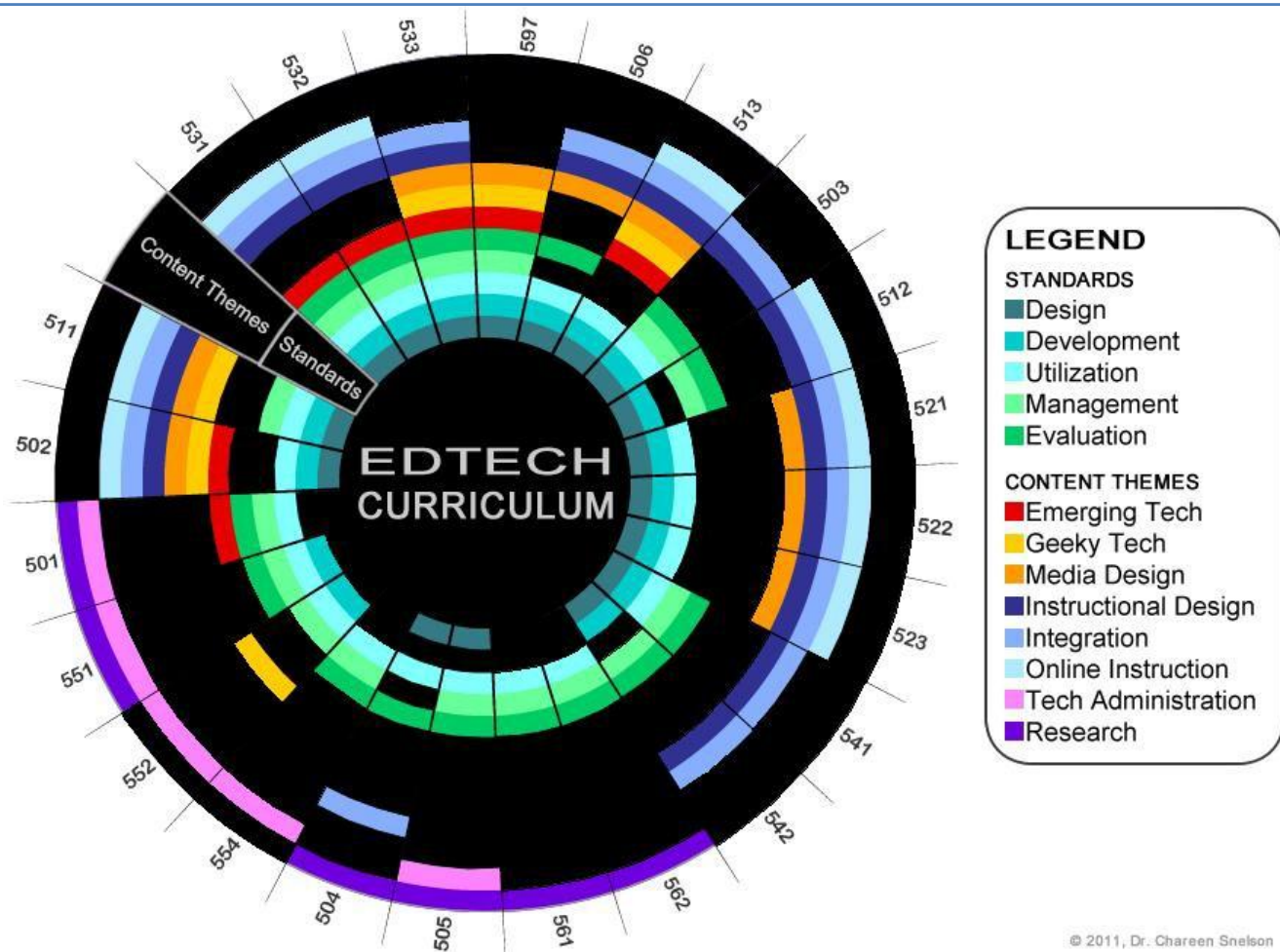
The remainder of the document contains a visual synthesis of the EDTECH Curriculum during the 2010/2011 academic year.

### *Acknowledgements*

The EDTECH Curriculum Committee is appreciated and thanked for attending meetings, assisting with data synthesis, and providing feedback along the way. Additional thanks goes to the EDTECH faculty and instructors who supported this work by completing the curriculum survey and giving feedback on the first draft of the report.

EDTECH Curriculum Committee  
Dr. Chareen Snelson (Chair)  
Dr. Kerry Rice  
Dr. Andy Hung  
Dr. Yu-Chang Hsu  
Dr. Dazhi Yang

## Broad Themes in the EDTECH Curriculum



### About the EDTECH Curriculum Graphic

The graphic was created to provide a visual depiction of major standards and broad content themes found within the EDTECH curriculum. Color coding was used to illustrate trends. The legend provides the key to interpreting color meanings. Courses were arranged in clusters rather than in sequential order around the outer perimeter of the circle graphic. This was done to make content themes more apparent. The inner track of five blue/green rings illustrates how courses align to the AECT *Standards for the Accreditation of School Media Specialist and Educational Technology Specialist Programs*. Black areas do not indicate gaps in the program. Some courses are more focused than others.

The content themes are contained in the eight outer rings of the circle diagram. These are broad areas of content designed to indicate general emphasis areas. Finer levels of detail are found on the following pages.

1. Emerging Tech: New technologies
2. Geeky Tech: Programming, networking, etc.
3. Media Design: Multimedia production
4. Instructional Design: Instructional Systems Design, Course, Unit, and Lesson planning
5. Integration: Instructional methodologies
6. Online Instruction: Courses emphasizing online pedagogy/andragogy
7. Tech Administration: Leadership and management

## 8. Research: Writing intensive courses

**AECT Standards Matrix**

EDTECH Courses Mapped to the *Standards for the Accreditation of School Media Specialist and Educational Technology Specialist Programs (4th ed.)*. Association for Educational Communications and Technology (AECT). EDTECH 501 – 506 are core classes.

	501	502	503	504	505	506	511	512	513	521	522	523	531	532	533	541	542	551	552	554	561	562
<b>STANDARD 1: DESIGN</b>																						
1.1 Instructional Systems Design (ISD)		x	x	x	x	x	x	x		x		x	x		x	x				x		
1.2 Message Design						x			x						x							
1.3 Instructional Strategies		x	x	x		x		x		x	x	x	x	x	x	x	x					
1.4 Learner Characteristics		x	x	x		x		x		x	x	x	x		x		x					
<b>STANDARD 2: DEVELOPMENT</b>																						
2.1 Print Technologies															x	x		x				
2.2 Audiovisual Technologies						x	x		x	x	x	x	x		x	x		x				
2.3 Computer-Based Technologies		x	x			x	x		x	x	x	x	x	x	x	x	x	x		x		
2.4 Integrated Technologies		x	x			x	x	x	x	x		x	x		x	x	x	x	x	x		
<b>STANDARD: UTILIZATION</b>																						
3.1 Media Utilization	x				x	x	x		x		x		x	x	x			x			x	x
3.2 Diffusion of Innovations	x			x	x					x					x					x	x	x
3.3 Implementation and Institutionalization	x			x	x					x		x	x		x	x			x			
3.4 Policies and Regulations	x	x	x		x					x		x			x	x		x	x	x		
<b>STANDARD 4: MANAGEMENT</b>																						
4.1 Project Management	x				x			x					x				x	x		x	x	x
4.2 Resource Management	x							x					x					x			x	x
4.3 Delivery System Management	x							x					x	x	x				x		x	x
4.4 Information Management	x						x						x			x		x			x	x
<b>STANDARD 5: EVALUATION</b>																						
5.1 Problem Analysis	x			x	x	x								x		x	x				x	x
5.2 Criterion-Referenced Measurement					x																	x
5.3 Formative and Summative Evaluation	x			x	x			x					x		x	x	x	x		x	x	
5.4 Long-Range Planning	x				x															x		

## Course Assignments by Category

This table contains general categories of assignments in EDTECH courses. EDTECH 501 – 506 are core classes.

	501	502	503	504	505	506	511	512	513	521	522	523	531	532	533	541	542	551	552	554	561	562
<b>WRITING</b>																						
Discussion Forums	x	x	x	x	x	x				x	x	x			x						x	x
Reflection	x		x	x	x	x	x	x	x	x	x		x	x	x	x		x	x		x	x
Learning Log	x									x					x							
Blogging	x					x			x				x									
Wiki Contributions				x								x										
Definition/Glossary	x				x																	x
Annotated Bibliography	x			x																	x	
Synthesis Paper	x			x																		
Learning Theory Paper				x										x								
Justification/Rationale						x										x						x
Summaries			x	x																		
Grant Writing																		x				
Proposal Writing					x		x											x				
Technical Writing (e.g., user manual)							x											x				
Letter Writing	x																					
Analysis Paper									x					x								
Thesis Proposal																					x	
<b>TRENDS/ISSUES</b>																						
Digital Divide/Equity	x																					
Netiquette		x																				
Accessibility		x																				
Universal Design						x																
Copyright/Plagiarism		x																				
Visual Literacy						x		x	x						x							
<b>INSTRUCTIONAL DESIGN</b>																						
Needs Assessment			x					x														
Learner Analysis			x					x														
Lesson Planning			x	x		x		x		x			x							x		
Unit Planning			x																			
Online Course								x														
Courseware Project							x															
ISD Project/Plan			x					x														
<b>ASSESSMENT/EVALUATION</b>																						
Evaluation Proposal for Fictitious RFP					x																	
Evaluation Rubric: Create and Use					x															x		



	501	502	503	504	505	506	511	512	513	521	522	523	531	532	533	541	542	551	552	554	561	562
Product/Software Evaluation					x															x		
Formative/Summative					x			x														x
Lesson Evaluation												x								x		
<b>INSTRUCTIONAL STRATEGIES</b>																						
Concept Map/ Graphic Organizer/Chart		x	x			x										x						x
Jigsaw		x		x																		
Virtual Field Trip		x																				
WebQuest		x																				
Scavenger Hunt		x																				
Project-Based Learning																	x					x
Timeline				x																		
Video Demonstrations																						x
Video Playlist Lessons															x							
Branching/Interactive Video									x						x							
Presentation/Exhibit	x								x	x	x		x	x	x	x						
Games/Simulations														x	x							
Virtual World Instruction													x									
Mobile Learning		x																				
Digital Storytelling									x				x		x							
Podcasting/Vlogging									x						x							
Peer Review				x		x									x							
Group Collaboration	x								x	x			x									x
Shared Feeds/Docs	x																					
Webcast/Video Chat															x							
Chat											x											
Building/Modeling													x	x								
<b>Web Design</b>																						
Web Page		x					x	x	x									x				
<b>MEDIA /DESIGN</b>																						
Graphic Design						x	x	x	x													
Audio Production							x		x													
Video Production							x		x						x							
Screen Capture/Recording							x		x	x					x							
Presentation Media									x						x							
Interactive Media							x		x						x							
Animation							x		x						x							

ATTACHMENT 1

	501	502	503	504	505	506	511	512	513	521	522	523	531	532	533	541	542	551	552	554	561	562
<b>Tests/ Quizzes</b>																						
Reading Quiz			x																			
Terminology Test					x																	
Final Exam																			x			
<b>HARDWARE/ NETWORK</b>																						
Networking Project																x			x			
Network Security																			x			
CISCO/CCNA Prep																			x			
<b>TECH LEADERSHIP (COORDINATION)</b>																						
Tech Use Planning	x																			x		
<b>PROFESSIONAL/ CAREER</b>																						
Staff Development Models	x																					
Design Inservice Training																				x		
Job Description			x																			

## Technologies and Mastery Levels

The following table contains a list of technologies and programming/coding taught in EDTECH classes. Estimated mastery levels are based on the amount of emphasis or course time devoted to the technology or coding skill. EDTECH 501 – 506 are core classes.

COLOR CODE	ESTIMATED MASTERY LEVEL
	Introductory = technology is introduced
	Intermediate = substantial unit or portion of the course
	Advanced = large part of the course

	501	502	503	504	505	506	511	512	513	521	522	523	531	532	533	541	542	551	552	554	561	562
<b>WEB DESIGN/CODING</b>																						
HTML/CSS		x							x													
ActionScript							x															
Linden Script														x								
Dreamweaver		x						x	x													
<b>MEDIA</b>																						
Audacity									x						x							
Fireworks		x				x		x														
Flash Pro							x															
PowerPoint/ Presentation Software	x								x					x	x							
Voice Thread	x								x	x				x						x		
QuickTime Pro									x													
Camtasia							x		x	x					x							
Jing										x					x							
Captivate							x															
Other Screen Recording Software									x	x				x	x							
Movie Maker															x							
iMovie															x							
Adobe Premiere Elements															x							
Other Video Editing															x							
Adobe Connect/Web Conferencing								x		x	x	x			x			x				
Skype											x									x		x
Instructor Videos					x						x			x	x							
<b>MS OFFICE</b>																						
Office 2010 or 2007						x										x		x			x	
<b>VIRTUAL WORLDS</b>																						
Second Life													x	x								
<b>WEB 2.0 (cloud)</b>																						

ATTACHMENT 1

	501	502	503	504	505	506	511	512	513	521	522	523	531	532	533	541	542	551	552	554	561	562
Google Docs	x		x	x	x				x	x	x							x				
Google Spreadsheet																				x		
Google Sites				x														x				
Google Reader	x																					
EndNote Web																					x	
Zotero	x																				x	
CiteULike				x																		
XTimeline				x																		
Blog				x		x			x	x				x								
WordPress	x					x																
Wiki				x								x										
RSS	x								x													
YouTube		x							x					x	x							
Other Video-Sharing															x							
Twitter						x																
Facebook	x																					
Linked in																						
Social Networks/Media	x									x		x	x									
Webspiration/ Google Drawing			x																			
Quiz/Rubric Generators																	x					
<b>LMS</b>																						
Moodle/Blackboard								x			x			x								
<b>STATISTICAL</b>																						
SPSS																						x
<b>HARDWARE</b>																						
Microphone														x	x							
Webcam														x	x							
Flip Camera															x							
Other Video Cam															x							
Mobile Device																						
Networking																			x			

## Course Descriptions and Goals/Objectives

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### *EDTECH 501 - Introduction to Educational Technology*

Overview of the field of educational technology emphasizing current issues, leadership in technology use planning, and evaluation/synthesis of research.

- ☐ define an element from the current definition of educational technology
- ☐ research current trends in educational technology
- ☐ compare Digital Divide to Digital Inequality
- ☐ evaluate your school's current technology environment
- ☐ examine, critique, and present elements of a technology use plan
- ☐ summarize major research findings and trends related to the use of technology in education to support integration of technology in the classroom or business
- ☐ identify and summarize three models of professional development
- ☐ analyze and synthesize research in educational technology
- ☐ outline a plan for your own Personal Learning Network (PLN) to assume a leadership role in the field of educational technology
- ☐ identify artifacts that align with course AECT Standards

### *EDTECH 502 - The Internet for Educators*

Locate, retrieve, and evaluate information found on the Internet. Design and produce instructional Web pages using a combination of software and HTML/XHTML/CSS code. Apply appropriate instructional strategies and models to the design of digital curriculum.

- ☐ create Web pages using HTML authoring system
- ☐ develop Web pages using CSS templates
- ☐ create a default page for a website
- ☐ apply file management skills to maintain local and remote Web site files and folders
- ☐ write HTML, XHTML, and CSS code correctly so that it validates under W3C standards
- ☐ copy and paste code into a Web page
- ☐ write CSS to position Web page content
- ☐ write and apply an external CSS style sheet to multiple Web pages
- ☐ write and apply alternative style sheets
- ☐ create a navigation menu for multiple Web pages
- ☐ create graphics in the appropriate format for Web pages
- ☐ modify images using image editing software
- ☐ insert images correctly into Web pages
- ☐ create client-side image maps
- ☐ apply appropriate design principles to create professional looking websites
- ☐ create accessible Web pages for individuals with disabilities
- ☐ adhere to rules of netiquette when corresponding with others on the Internet
- ☐ identify and apply copyright and fair use guidelines for website development
- ☐ use Internet search tools to locate high-quality instructional content
- ☐ develop appropriate rules of netiquette for a specified group of learners
- ☐ develop a page of hot links to essential information about Web accessibility
- ☐ develop an Internet scavenger hunt learning activity that integrates Internet resources
- ☐ develop a Jigsaw cooperative learning activity that integrates Internet resources
- ☐ develop an online learning activity for mobile devices
- ☐ develop a WebQuest learning activity that integrates Internet resources

- ☐ develop a virtual field trip learning activity that integrates multimedia and Internet resources

### *EDTECH 503 - Instructional Design*

Focuses on systematic design of instruction and alternative models. Project required.

- ☐ Describe the rationale for and processes associated with needs, learner, context, goal, and task analyses
- ☐ Create and conduct various aspects of a front-end analysis
- ☐ Identify methods and materials for communicating subject matter that are contextually relevant
- ☐ Describe the rationale for and processes associated with creating design documents (objectives, motivation, etc.)
- ☐ Construct clear instructional goals and objectives
- ☐ Develop a motivational design for a specific instructional task
- ☐ Develop assessments that accurately measure performance objectives
- ☐ Select and implement instructional strategies for selected learning tasks
- ☐ Select appropriate media tools that support instructional design decisions
- ☐ Describe the rationale and processes associated with the formative evaluation of instructional products
- ☐ Carry out at least one type of formative evaluation
- ☐ Create a plan for remaining types of formative evaluation
- ☐ Identify and use technology resources to enable and empower learners with diverse backgrounds, characteristics, and abilities.
- ☐ Apply state and national content standards to the development of instructional products
- ☐ Meet selected professional standards developed by the Association for Educational Communications and Technology
- ☐ Use various technological tools for instructional and professional communication

### *EDTECH 504 - Theoretical Foundations of Educational Technology*

Overview of classic and contemporary theories of learning and their applications in educational technology and emerging orientations; implications for practice. Prerequisite: EDTECH 501.

- ☐ Compare and contrast notions of past, present and future theories of educational technology
- ☐ Distinguish between the theoretical positions that underlie current approaches to educational technology
- ☐ Define and identify epistemological principles
- ☐ Identify major theoretical schools of thought
- ☐ Differentiate between epistemological beliefs and theoretical schools of thought
- ☐ Describe and account for the origins of major theories and their influence on educational technology
- ☐ Show how perceptions and approaches to educational technology have been influenced by prevailing educational theories
- ☐ Explain how systematic approaches to educational technology differ from traditional classroom-based approaches to teaching
- ☐ Contextualize emerging theories of learning within the framework of advancing technological innovations
- ☐ Apply educational technology theories to practical development contexts

### *EDTECH 505 - Evaluation for Educational Technologists*

Procedures for evaluating educational programs, training systems, and emergent-technology applications. Prerequisite: EDTECH 501, EDTECH 503.

- ☐ Define a number of terms related to the field of evaluation and research and apply them to various projects
- ☐ Describe what is meant by evaluation and its role in educational technology
- ☐ Discuss the rationale for conducting an evaluation
- ☐ Identify the role of and audience for evaluation
- ☐ Describe an "Evaluator's Program Description" and the uses for one

- ☐ Describe similarities and differences between evaluation models, their components, and how they contrast with research models
- ☐ Discuss types and levels of data as well as data collection tools
- ☐ Discuss the issue of sampling as it applies to evaluation
- ☐ Describe the rationale for and the components of an evaluation report
- ☐ Select appropriate evaluation strategies and procedures for a given educational program or instructional product
- ☐ Successfully collaborate on various evaluation projects

### *EDTECH 506 - Graphic Design for Learning*

Select, arrange, and design visual representations (e.g., text, graphics, tables) based on theories, models, and principles of visual literacy and graphic design.

- ☐ Apply principles of visual literacy to the design of instructional messages
- ☐ Select and apply principles of graphic design when developing instructional materials and presentations
- ☐ Select appropriate combinations of graphic and image representations to supplement text-based instruction.
- ☐ Develop instructional content that integrates multiple instructional messages to achieve identified learning goals
- ☐ Use image editing software (ie., Fireworks CS5) to create and modify images for digital and print formats

### *EDTECH 511 - Interactive Courseware Design*

Learning the tools for development of instructional courseware, which is the graphic interface for delivery of online instruction. Development of functional and instructionally effective courseware. Prerequisite: EDTECH 502, 503, or instructor permission.

- ☐ Explore, categorize, and evaluate existing Flash projects
- ☐ Create basic Flash projects that incorporate animation, interaction, and multimedia elements
- ☐ Participate in class discussion and online communication for the purpose of sharing resources, ideas, and drawing conclusions on projects and issues
- ☐ Design and develop an interactive instructional program using Flash

### *EDTECH 512 - Online Course Design*

Emphasizes web-based instructional design for the development of online courses. Consideration is given to various models of online delivery, content organization and presentation, and graphic design. Course participants create a fully-developed online course. Prerequisite: EDTECH 502 or Instructor Permission.

- ☐ Identify learning theories and best practices as identified by research that support current approaches to effective online course design
- ☐ Identify five phases of web-based instructional design (WBID) model
- ☐ Apply five phases of web-based instructional design by creating an online course site consisting of a syllabus, a minimum of five modules, integrated learning activities and assessments, and implementation ready
- ☐ Identify principles of visual literacy
- ☐ Apply graphic design concepts and principles, and concepts of perception, in all materials design

### *EDTECH 513 - Multimedia*

Research-based principles of multimedia learning are combined with technical skills of multimedia production to produce a series of digital multimedia projects for classroom and online applications.

- ☐ apply design principles which specify optimal conditions for learning
- ☐ demonstrate personal skill development using software applications of your choice

- ☐ apply principles of multimedia learning to the development of instructional messages specific to the learning task
- ☐ identify appropriate media to produce effective learning environments using technology resources
- ☐ create audio/video instructional materials which use computer-based technologies
- ☐ apply authoring tools to create effective hypermedia/multimedia instructional materials or products
- ☐ develop instructional materials and products for various distance education delivery technologies
- ☐ identify and apply copyright and fair use guidelines within practice

### *EDTECH 521 - Online Teaching in the K-12 Environment*

Examines research-supported practices in online teaching and learning in the K-12 environment. Emphasizes online teaching tools, caseload management, learner engagement, and individualized instruction. Project required.

- ☐ develop an online community of learners
- ☐ demonstrate an understanding of various asynchronous and synchronous online teaching tools (i.e. threaded discussions, Breeze products, etc.)
- ☐ identify and summarize effective ways to manage the virtual student caseload
- ☐ demonstrate an understanding of various strategies for engaging learners in a virtual environment through reflective and hands-on activities
- ☐ demonstrate competency in data analysis techniques designed to assist in individualizing instruction
- ☐ Identify additional strategies to differentiate instruction (i.e. learning styles, adaptive/assistive technologies, pacing, supplemental activities and remediation.)
- ☐ create online learning activities that successfully engage learners and are appropriate to their grade level and content area
- ☐ develop and deliver asynchronous and synchronous lessons that use appropriate and effective multimedia design elements

### *EDTECH 522 - Online Teaching for Adult Learners*

Emphasizes andragogy and best practice in online teaching, analyzing online teaching tools, planning, facilitating, and assessing collaborative and interactive e-learning experiences, and gaining practical experience teaching online.

- ☐ Develop an online collaborative community with peers
- ☐ Learn basic models and theories of adult learning and clarify or begin to define a personal perspective
- ☐ Learn terminology and "best" (effective) practices of online teaching for adults
- ☐ Demonstrate an awareness of current trends, research, and standards in online teaching and learning
- ☐ Analyze the range of technologies available for online education and training, and identify key features and uses for distance learning
- ☐ Evaluate various online teaching and learning tools for potential use in their own instructional program
- ☐ Design online learning activities that successfully engage learners and are appropriate to their learners
- ☐ Gain real life experience teaching others online
- ☐ Successfully use administrative features of learning management systems
- ☐ Support the professional development of other educators in the area of online teaching

### *EDTECH 523 - Advanced Online Teaching*

Emphasizes content-specific instructional strategies, methods, data analysis, and improved communication in online instruction. Experience with web-based video/audio communication tools recommended. Prerequisite: EDTECH 521 or 522. At the end of the course, each participant will be able to:

- ☐ Understand the significance of building community in online environments
- ☐ Identify and develop strategies for building community online
- ☐ Develop content specific instructional strategies for various asynchronous and synchronous online teaching tools (i.e. threaded discussions, Breeze products, etc.)



- ☐ Develop effective ways to manage the virtual student caseload
- ☐ Identify a theoretical basis for the development of effective teaching strategies for engaging learners in online environments
- ☐ Incorporate constructivist teaching strategies for engaging learners in a virtual environment
- ☐ Develop data analysis techniques designed to assist in individualizing instruction
- ☐ Develop additional strategies to differentiate instruction (i.e. learning styles, adaptive/assistive technologies, pacing, supplemental activities and remediation.)
- ☐ Create and deliver lessons suitable for asynchronous and synchronous delivery that use appropriate and effective multimedia design elements
- ☐ Develop strategies for involving, communicating, and connecting with diverse students and parents
- ☐ Identify leading recommendations, guidelines and standards for online environments

### *EDTECH 531 Teaching and Learning in Virtual Worlds*

Explores teaching and learning in virtual worlds. Project-based design, facilitation, and evaluation of instruction, research, and other resources. \*Weekly synchronous class meetings required in Second Life.

- ☐ Identify, analyze, and synthesize recent research in the use of virtual worlds for teaching and learning
- ☐ Explore in-world and out-of-world technologies and tools to support virtual teaching subject area resources in SL
- ☐ Understand pedagogical/andragogical techniques, and instructional models for virtual world teaching
- ☐ Understand methods of assessment and data collection in virtual worlds
- ☐ Design, implement, and evaluate virtual world instruction
- ☐ Reflect on weekly readings and assignments through in-world synchronous meetings and outworld discussions
- ☐ Contribute to the evolving social network of virtual world teachers

### *EDTECH 532 - Educational Games & Simulations*

Explores the theory and implementation of educational games, simulations, and virtual environments for improved instructional engagement. Includes evaluation methods and socio-cultural implications. \*Weekly synchronous class meetings required in Second Life.

- ☐ Demonstrate an awareness of current trends and research in educational gaming
- ☐ Analyze various social issues and factors associated with educational games and simulations
- ☐ Identify and evaluate games and simulations appropriate to various teaching and learning contexts
- ☐ Identify features of virtual worlds appropriate for teaching and learning
- ☐ Design educational gaming activities and/or applications that successfully engage learners and are appropriate to their discipline
- ☐ Support the professional development of other educators in the area of educational games and simulations
- ☐ Create a virtual world resource to support educational technologists, emphasizing educational gaming and simulations

### *EDTECH 533 - YouTube for Educators*

Produce educational video for YouTube using digital video cameras and editing software. Design and develop appropriate instructional activities that integrate online video. Examine the benefits and controversial aspects of YouTube in the classroom.

- ☐ identify features of YouTube that are similar or different from traditional forms of educational film
- ☐ review scholarly literature written about YouTube
- ☐ create an Educator's YouTube channel
- ☐ customize the appearance of a YouTube channel
- ☐ use online search tools to locate video clips that are valuable for instruction
- ☐ collect video on YouTube through playlists, favorites, and subscriptions

- ☐ select video clips that map to the cognitive, affective, and psychomotor domains
- ☐ write instructional objectives for the cognitive, affective, and psychomotor domains
- ☐ create playlist lessons using videos found on YouTube
- ☐ record video commentary (video logs or Vlogs) using a Webcam
- ☐ upload video content to YouTube
- ☐ add closed captioning to YouTube videos
- ☐ share video both publicly and privately in YouTube
- ☐ write a script and storyboard for a video production
- ☐ use screencasting software to create a video presentation, peer review video, or tutorial
- ☐ use video editing software to produce high-quality video for YouTube
- ☐ design and produce educational interactive video
- ☐ use the communication tools in YouTube to collaborate with other YouTube members
- ☐ identify and discuss critical issues and controversies associated with YouTube
- ☐ write a reflective journal describing what was learned and impact on thoughts about teaching

### *EDTECH 541 - Integrating Technology into the Classroom Curriculum*

Examination and evaluation of technology integration strategies in classroom environments using various application, instructional, Internet and productivity tools. Development of integrated instructional activities and resources.

- ☐ Demonstrate knowledge of hardware function, installation, selection and maintenance by developing a networking/hardware lesson or conducting a field trip
- ☐ Locate and evaluate current research on teaching and learning with technology and generate a personal rationale for using technology in education based on findings from research and practice
- ☐ Define and identify instructional software types and uses
- ☐ Identify and develop effective classroom activities using telecommunications tools and the Internet and will demonstrate this knowledge through reflective activities and the development of one or more web-based activities
- ☐ Develop effective classroom activities using advanced features of database management systems and/or advanced spreadsheet software tools and demonstrate knowledge of this through the development of a database or spreadsheet supported lesson
- ☐ Identify and classify adaptive assistive hardware and software for students and teachers and demonstrate this knowledge through reflective discussion activities
- ☐ Identify and describe teaching and learning tasks as well as productivity uses for Internet-based tools
- ☐ Identify and describe teaching and learning tasks with productivity software tools
- ☐ Identify current issues in all content areas that will impact the selection and use of technology
- ☐ describe key strategies for integrating technology into those content areas, and identify example software and Web resources required to carry out each integration strategy.

### *EDTECH 542 - Technology-Supported Project-Based Learning*

Examines the Project-Based Learning Model, including development of PBL-based instructional units that engage learners in projects requiring investigation, analysis, synthesis, and presentation in real-world scenarios.

- ☐ Be able to identify characteristics and attributes of Project Based Learning (PBL)
- ☐ Be able to align goals and objectives of PBL with state and local standards for learning
- ☐ Be able to explore and implement teacher role as coach, mentor or tutor in guiding students through the PBL process
- ☐ Be able to develop formative and summative assessments for monitoring and evaluating PBL unit and student outcomes
- ☐ Be able to design collaborative learning activities that support student learning in the PBL process
- ☐ Discuss the advantages and disadvantages of PBL and the related implications for student achievement
- ☐ Be able to develop a Project Based Learning unit using the Buck Institute for Education PBL model.

*EDTECH 551 - Technical and Grant Writing*

Project-based instruction entailing various kinds of technical writing, all focusing on a completed grant proposal. Includes evaluating writing for print versus electronic display. Additional focus on writing proficiencies, as needed.

- ☐ Students will demonstrate an appreciation for and ability to recognize and produce good writing and design, recognizing technical writing as a craft and viewing themselves as professionals who take pride in their craft.
- ☐ Each student will develop a fundable media-related project and secure needed data and background information for the project, and then design a proposal and website to help fund the project. This work would include identifying appropriate technologies for learning situations, establishing mission, goals and objectives for the project, preparing and justifying a budget to support the project, using a planning process to develop and implement the project, and developing formative and summative evaluation strategies.
- ☐ The student will demonstrate the skills and knowledge required to prepare printed and online documents, including the key steps in the process: identifying audience needs, planning, developing, organizing, drafting, revising, and graphically enhancing online documentation.
- ☐ The student will be able to apply the skills of revision, editing, proofreading, and verifying information to the process of developing printed and online documents.
- ☐ The student will recognize and apply the principles that differentiate writing for documentation from writing for print, including accessing and linking.
- ☐ The student will be able to select the most effective system and approach for a website designed to explain his/her project. This site will be based on user needs and software capabilities.
- ☐ The student will recognize and apply the principles of global communication, including nonsexist language, unbiased language, and a multicultural perspective. In all work submitted, the student will adhere to copyright and fair use guidelines.

*EDTECH 552 -Introduction to Network Administration*

Introduction to technical competencies for school technology coordinators, addressing network administration, topography, and devices. Preparation for the CCENT (Cisco Certified Entry Networking Technician ) or CCNA (Cisco Certified Network Associate ) certificate.

- ☐ Perform simple PC (hardware, software, network settings) and NIC troubleshooting
- ☐ Perform binary math
- ☐ Properly utilize the information and bandwidth units
- ☐ Name and describe the OSI layers from memory
- ☐ Describe the TCP/IP graph
- ☐ Describe the devices required to build a LAN
- ☐ Build and troubleshoot a simple LAN
- ☐ Describe networking signals and what can happen to them on physical media
- ☐ Use a multimeter to measure resistance, voltage, and continuity
- ☐ Describe the 5 basic types of networking media
- ☐ Properly terminate CAT 5 UTP cable according to standards
- ☐ Given a topology, circle all collision and broadcast domains
- ☐ Describe the basic elements of a frame
- ☐ Perform hexadecimal math
- ☐ Compare and contrast Token Ring, FDDI, and the Ethernet family tree
- ☐ Explain the specific details of Ethernet and Layer 2 Devices
- ☐ Use 'Network Inspector' (or equivalent) and 'Protocol Inspector' (or equivalent) software
- ☐ Create physical and logical topologies
- ☐ Properly locate MDFs and IDF in an Ethernet extended star topology

- ☐ Plan a structured cabling installation
- ☐ Install, terminate, test, and troubleshoot CAT 5 UTP cabling runs, from the jack to the patch panel
- ☐ Use the Fluke 620 (or equivalent) meter
- ☐ Justify the need for and classify the various types of IP addresses
- ☐ Perform subnet calculations
- ☐ Perform the following form of problem: "Given an IP address and the number of subnets required, find the subnetwork id numbers, the range of host numbers, the subnetwork broadcast numbers, and the subnet mask
- ☐ Provide a basic explanation of routing
- ☐ Flowchart basic network processes such as ARP and RARP
- ☐ Explain the similarities and differences between IP, TCP, and UDP
- ☐ Explain the basic processes of the session layer
- ☐ Describe the presentation layer functions of formatting, encryption, and compression
- ☐ Explain how e-mail and HTTP work

### *EDTECH 554 - Managing Technology Integration in Schools*

Explores strategies for planning and implementing technology integration on an organizational level and examines larger scale professional development models. Develops skills for taking a leadership role in district technology use planning, implementation and assessment.

- ☐ Analyze, evaluate and become familiar with a district's technology plan by articulating the vision, goals and objectives
- ☐ Develop the skills and knowledge to support data-driven decision making to improve instruction
- ☐ Examine the leadership role of the technology director
- ☐ Design a professional development activity to support ongoing professional development regarding the use of technology in support of student learning
- ☐ Create a plan communicating how to improve the infusion of technology within a K-12 learning environment

### *EDTECH 561 - Research In Educational Technology*

Review and analysis of research studies in educational technology. Foundations in the relationships among research design, measurement, and statistics; methodology for designing, conducting, and reporting educational technology research. Prerequisite: EDTECH 504.

Students will be able to

- ☐ Define and apply fundamental concepts of educational research
- ☐ Become a critical reviewer and evaluator of research in the field of educational technology
- ☐ Understand the steps involved in the research process and be able to plan accordingly
- ☐ Identify and describe a research problem and relevant sub problems
- ☐ Specify a research purpose and research questions or hypotheses
- ☐ Understand the characteristics of qualitative and quantitative research methods and determine the best uses of each method
- ☐ Become familiar with ethical research practices and successfully complete the Collaborative Institutional Training Initiative (CITI) program for the protection of human subjects
- ☐ Become familiar and carefully follow APA 6th style on written assignments
- ☐ Conduct and write a comprehensive literature review on a topic in educational technology

### *EDTECH 562: Introduction to Statistics for Educational Technology*

Statistical concepts and their applications in educational technology. Topics include measures of central tendency and variability, one and two sample tests, confidence intervals, chi-square, introduction to bivariate correlation, and analysis of variance.

- ☐ Summarize and describe data according to educational technology research questions
- ☐ Input, output, and organize data in SPSS
- ☐ Understand common statistical concepts, such as hypothesis testing, critical values and p-values, confidence interval, etc., in educational research
- ☐ Identify and articulate differences between/among common statistical analysis methods
- ☐ Perform and describe descriptive analysis using SPSS in educational technology research
- ☐ Perform and interpret inferential analysis using SPSS in educational technology research
- ☐ Critique and evaluate common statistical analysis methods in educational technology literature

## Current Special Topics Courses

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### *EDTECH 597 - Social Network Learning*

This graduate level course will explore collaborative and emergent pedagogies, tools, and theory related to the use of social networks in learning environments. Participants will gain hands-on experience with a variety social networking tools, create a community-based resource, and have an opportunity to develop a global professional network for educational technologists.

### *Edtech 597 - Teaching Mathematics in Virtual Worlds*

This is an experimental course exploring the possibility of mathematics instruction in virtual worlds, primarily in Second Life. Opportunities and difficulties in the communication of mathematical knowledge in 3D online environments will be explored. \*Weekly online synchronous class meetings required in Second Life, 3-5 pm PT/4-6 MT, Thursday.

### *EDTECH 597 - Mobile Learning: Devices, Applications & Pedagogy*

Research, evaluate, and create mobile learning environments using various mobile learning technologies to engage learners in fun and creative ways. Participants are required to have an Internet-enabled mobile device, preferably an iPhone, for the class.

### *EDTECH 597 Introduction to Edutainment*

This course provides an overview of instructional elements in technology-based edutainment (i.e. cartoons, TV programs, movies, digital games, and smart phones). Learners will conduct research on the practical application of edutainment in classroom settings through experimentation and play.

### *EDTECH 597: International Issues in ICT*

Explores the implementation of information and communications technologies (ICT) in selected educational systems outside of the United States. The goal is for students to be able to confidently discuss the promises and challenges of ICT integration in both developed and developing countries as impacted by different contexts. A multitude of issues will be explored, to include open courseware, mobile learning and satellite communication, cultural models of design, and distance learning systems.

### *EDTECH 597: Blogging in the Classroom*

Focuses on the use of blogs in education, including creating and maintaining blogs, using RSS readers and microblogging. Students will examine the nature and purpose of blogging, types of blog entries, blog promotion, disclosure guidelines, and building a blogging community.

### *EDTECH 597: Pedagogy of Sound*

Provides an overview of sound-based pedagogies and methodologies suitable for online, blended or classroom learning.

Students will develop technical skills in order to record, edit and share their own sounds and sound effects.

## Recommendations

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Based on the results of curriculum mapping we recommend the following:

- ☐ Use this document when proposing course changes or new courses.
- ☐ Use the standards matrix to identify which standards students will address/collect in their learning logs in preparation for portfolio.
- ☐ Add departmental language to all courses/syllabi for reflection assignment that connects to standards and helps prepare for portfolio.
- ☐ Address how reflective practice is important for advanced practitioners in the field.

## Appendix: Example of a Reflection Assignment

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This assignment is given in the YouTube for Educators Course (Chareen Snelson, Instructor)

### *Reflective Journal-Learning Log (25 points)*

In this assignment you will write a one-page reflection paper about your experiences in the course (or record your reflection as a 2 to 5 minute VLOG). This assignment relates directly to the ePortfolio for the M.E.T. program that many of you have been admitted to. Because of this, the assignment was designed to maximize the benefits of reflection while simultaneously preparing you for your culminating activity. If you are not in the M.E.T. program, you will still benefit from the process of reflection.

#### **Background Information for M.E.T Candidates**

- ☐ Portfolio information on the EDTECH website: <http://edtech.boisestate.edu/web/final-activity.htm>
- ☐ ePortfolio resources and examples: <http://edtech.boisestate.edu/snelsonc/eportfolio.html>
- ☐ Generic learning log for EDTECH: <http://edtechbsu.wordpress.com/>

#### **Maintain an Ongoing Learning Log**

It is in your best interest to keep some kind of blog where you write learning log entries as you progress through the program. There are many ways to do this, but you might enjoy trying WordPress: <http://wordpress.com/>. It is free, posts can be public or private, you can add tags or categories to organize posts, and there is some free file storage.

#### **Instructions for the Reflective Journal Assignment**

##### *Review the AECT Standards Document*

Standards for the Accreditation of School Media Specialist and Educational Technology Programs:  
<http://www.aect.org/standards/initstand.html>

##### *Review the Syllabus*

A list of the course assignments and how they map to the AECT standards is provided in the syllabus. As you go through the list of assignments, read the information about the related standard in the AECT standards document. When you see **NA** it means that standard does not align to any of the assignments for this course.

*Answer the four questions below in your reflection:*

1. What were the most important things I learned this semester?
2. How was my teaching (or thoughts about teaching) impacted by what I learned or experienced this semester?
3. Did I (or will I) use the projects, skills, or ideas from this course in my teaching or training? If so, how?
4. Select at least three of the projects you created this semester and read the description of the related AECT standard. Then answer this question: How do these projects demonstrate my mastery of the AECT standards?

*There are three options for your reflection (pick one):*

- ☐ Option 1: Type your answers a Word document and upload it here in Moodle. (1 page of writing)
- ☐ Option 2: Type your answers in a blog post on your learning log site and e-mail the link to the instructor. (1 page or approximately 500 to 750 words)
- ☐ Option 3: Record a video log (VLOG) as a video form of reflection paper. Send a link to the instructor through e-mail or through the YouTube inbox. (2 to 5 minute video)

## APPENDIX D

### Faculty Curricula Vitae

Each full-time, tenure track faculty member in the Department of Educational Technology assembled a three to four page vita. The documents shows recent or outstanding scholarship, teaching, and service efforts.

Links to faculty members' full C.V.'s can be found online through the department's website.  
<http://edtech.boisestate.edu>

The documents are listed by faculty last name in alphabetical order:

<b>Name</b>	<b>Rank / Role</b>	<b>At BSU Since</b>
Baek, Youngkyun	Professor	2011
Dawley, Lisa	Professor; Dept. Chair (Sabbatical FY12)	2005
Hsu, Yu Chang	Assistant Professor	2010
Hung, Jui-Long	Assistant Professor	2007
Perkins, Ross	Assistant Professor	2008
Rice, Kerry	Associate Professor; Interim Chair (FY12)	2001
Snelson, Chareen	Associate Professor	2003
Wyzard, Constance	Professor, Associate Chair	1993
Yang, Dahzi	Assistant Professor	2010



**Youngkyun Baek, Ph.D.**

Professor,  
 youngkyunbaek@boisestate.edu  
 Tel: 208-426-1023  
 E 314

**EDUCATION**

- 1) Sep. 1980 – Feb. 2000 Ph.D. Graduate School Korea University  
 Specialization: Educational Sociology with emphasis on Computers in Education  
 Dissertation: An Analysis of Communications in Two Cyberspace Learning Communities
- 2) Mar. 1984 – Feb. 1988 Ph.D. Graduate School Georgia State University  
 Specialization: Educational Foundations with emphasis on Computer based Instruction  
 Dissertation: Using Color, Graphics, and Animation in a Computer Assisted Tutorial Lesson
- 3) Sep. 1978 – Feb. 1980 M.A. in Educational Sociology, Graduate school Korea University
- 4) Mar. 1974 – Feb. 1978 B.A. in English Education, Kongju National University

**SELECTED PROFESSIONAL POSITIONS**

- 1) Jan. 2010 – Present President, Korean Association of Educational Methodology Studies
- 2) Mar. 1991 – Jun. 2010 Assistant Professor, Associate Professor, Professor of  
 Educational Technology, Korea National University of Education, Korea
- 3) Aug. 2006 – Aug. 2007 Visiting Professor, University of Cincinnati
- 4) Jul. 1998 – Aug. 1998 Adjunct Visiting Professor  
 The University of British Columbia, Canada
- 5) Mar. 1989 – Feb. 1991 Senior Researcher, Computer Education Research Center, Korea  
 Educational Development Institute

**COURSES TAUGHT (PAST SIX SEMESTERS ONLY)**

- 1) EDTECH 597 Introduction to Edutainment, Spring 2011 at BSU
- 2) New Media in Education, Fall 2010 at Korea National University of Education
- 3) Virtual World in Education, Fall 2010 at Korea National University of Education
- 4) Design of Instructional Game, Spring 2010 at Korea National University of Education
- 5) Development of Instructional Game, Spring 2010 at Korea National University of Education

**SELECTED REFEREED PUBLICATIONS (2008-2011)**

- 1) Kim, Bo-Kyeong, Park, Hyungsung, and Baek, Youngkyun (2009). Not just fun, but serious strategies: Using meta-cognitive strategies in game-based learning. *Computers & Education*, 52(4), May 2009, 800-810.
- 2) Kim, Bo-Kyeong, Cheong, Donguk, Baek, Youngkyun (2008). Research directions of teaching simulations developing: Through the analysis of teaching simulations for American teacher education. *Journal of Educational Technology*, 24(3), 209-240.
- 3) Baek, Young (2008). What hinders teachers in using computer and video games in the classroom? Exploring factors inhibiting the uptake of computer and video games. *CyberPsychology and Behavior*, 11(6), 665-671.

- 4) Yun, Seongchul, Paul Chamness Miller, Youngkyun Baek, & Jaeyeob Jung (2008). Improving recall and transfer skills through vocabulary building in web-based second language learning: An examination by item and feedback type. *Educational Technology and Society*, 11(4), 158-172.

### SELECTED BOOKS OR BOOK CHAPTERS (2006-2011)

#### Books

- 1) Baek, Youngkyun (2010). *Gaming for Classroom-Based Learning: Digital Role Playing as a Motivator of Study* (ed.). New York: IGI Global.
- 2) Baek, Youngkyun (2010). *Teaching and Learning in a Virtual World*. Seoul: Hakjisa.
- 3) Gibson, David and Baek, Youngkyun (2009). *Digital Simulations for Improving Education: Learning Through Artificial Teaching Environments* (Co-Ed.). New York: IGI Global.
- 4) Baek, et. al. (2006). *Educational Technology and Methods: In ubiquitous world* (Co-author, 2nd Ed.). Seoul: Hakjisa.
- 5) Baek, Youngkyun (2006). *Understanding and Application of Game Based Learning*. Seoul: Kyoyookkwahaksa.
- 6) Baek, et., al. (2006). *Theory and Practice of Educational Media* (Co-author). Seoul: Mun-um Publishing Co.

#### Book Chapters

- 7) Kim, Bokyeong & Baek, Youngkyun (2010). Exploring ideas and possibilities of Second Life as an Advanced E-learning Environment. In Harrison Hao Yang, & Steve Chi-Yin Yuen (Eds.), *Handbook of Research on Practices and Outcomes in E-Learning: Issues and Trends*. IGI-Global.
- 8) Cheong, Donguk, Baek, Youngkyun, Yun, Seongchul, & Kim, Hoe Kyeung (2010). Pre-service teachers' teaching practice in Second Life. In N. M. Burk.(Ed.) *Best Teaching Practices For Use in Virtual Environments: Instructional Handbook*. Glendale, AZ: Glendale Community College.
- 9) Park, Hyungsung and Baek, Youngkyun (2009). Empirical Evidence and Practical Cases for Using Virtual Worlds in Educational Contexts. In Harrison Hao Yang, & Steve Chi-Yin Yuen (Eds.), *Collective Intelligence and E-Learning 2.0: Implications of Web-Based Communities and Networking* (pp.227-246). IGI-Global.
- 10) Baek, Y. K. (2008). Revealing New Hidden Curriculum of Digital Games, Richard E. Fertig (ed., pp.1025-1040), *Handbook of Research on Effective Electronic Gaming in Education*. IGI-Global.

### SELECTED PRESENTATIONS (2006-2011)

- 1) Baek, Y. K. (2010, March 29 - April 2). a Keynote Panel Speaker at SITE 2010--Society for Information Technology and Teacher Education 21st International Conference. San Diego
- 2) Moon, H. K. & Baek, Y. K. (2009, November 30-December 4). *Exploring variables affecting player's intrinsic motivation in educational games*. Paper presented at the 17th International Conference on Computers in Education, HongKong.
- 3) Gibson, David, Baek, Youngkyun, Kirk Bandersall, Leonard Annetta, & Penny Nolte. (2009). *Assessment of learning with games and simulations*. Proceedings of the 20th Society for Information Technology & Teacher Education International Conference, Charleston, South Carolina, USA, 1450-1455.
- 4) Seo, Kay Kyeongju, Patience Sowa, Cynthia Schmidt, Youngkyun Baek, Aimee Byk, & Donguk Cheong. (2009). *Talking technology across divides*. Proceedings of the 20th Society for Information

Technology & Teacher Education International Conference, Charleston, South Carolina, USA, 2347-2353.

- 5) Park, Hyungsung, Baek, Youngkyun, & Hwang, Jihyun (2009). *The effect of learners and game variables on social problem-solving in simulation game*. Proceedings of the 20th Society for Information Technology & Teacher Education International Conference, Charleston, South Carolina, USA, 1527-1533.
- 6) Searson, M., Gibson, D., Baek, Y. K., Field, W., & Yoon, K. K. (2008). *Games and simulations: global perspectives*. Proceedings of the 19th Society for Information Technology & Teacher Education International Conference, Las Vegas, USA, 1805-1807.
- 7) Baek, Y. K., & Choi, S. C. (2008). *Implications of educational digital game structure for use in formal education settings*. Proceedings of the 19th Society for Information Technology & Teacher Education International, Las Vegas, USA, Conference, 1613-1619.
- 8) Cha, Jiseon, Baek, Youngkyun, & Xu, Yan (2008, November). *Exploring learner's variables affecting gaming achievement in digital game-based learning*. Paper presented at The 2nd IEEE International Conference on Digital Game and Intelligent Toy Enhanced Learning, Banff, Canada.
- 9) Baek, Youngkyun, Kim, Bokyeong, Yun, Seongchul, & Cheong, Donguk (2008, October). *Effects of two types of Sudoku Puzzles on Students' Logical Thinking*. Paper presented at 2nd European Conference on Games Based Learning, Barcelona, Spain.
- 10) Baek, Youngkyun. (2008, March). Games and simulations: Global perspectives. In K. McFerrin, R. Weber, R. Carlsen & D. A. Willis (Eds.), *Proceedings of the 19th Society for Information Technology & Teacher Education International Conference*, Las Vegas, USA, 1805-1807.

#### **EXTERNAL COMPETITIVE GRANTS (FUNDED ONLY) (2006-2011)**

- 1) 2009.06.12-2009.12.15 Development of Teacher Training Program for 21<sup>st</sup> Century Learners (High School)  
Korea Educational Research & Information Services
- 2) 2008.09.01-2008.11.28 Development of Web Contents for Decision Making about Career  
Seoul Broad of Education
- 3) 2008.09.01-2008.11.28 Development of Teacher Training Program for 21<sup>st</sup> Century Learners (Middle School); Korea Educational Research & Information Services

#### **SELECTED SERVICE TO UNIVERSITY, STATE, NATIONAL, OR INTERNATIONAL UNITS (2006-2011)**

- 1) Reviewer, American Educational Research Association, 2009 - 2011.
- 2) Program/Review Committee, The 3rd IEEE International Conference on Digital Game and Intelligent Toy Enhanced Learning, April 12-16, 2010, Kaohsiung, Taiwan
- 3) Program committee, SITE 2009-Society for Information Technology & Teacher Education International Conference, Charleston, SC, USA; March 2-6, 2009
- 4) Program/Review Committee, The 2nd IEEE International Conference on Digital Game and Intelligent Toy Enhanced Learning, November 17-19, 2008, Banff, Canada
- 5) Reviewer, Educational Technology and Society 2007 - present
- 6) Reviewer, Computers and Education, 2006 - present
- 7) Reviewer, CyberPsychology and Behavior, 2006 - present
- 8) Editorial Board Member, International Journal of Gaming and Computer-Mediated Simulations, 2008-present

**Lisa Dawley, Ph.D.**

Professor

lisadawley@boisestate.edu

<http://lisadawley.wordpress.com>

Tel: 208-426-5430

ED 305

**EDUCATION**

Ph.D., Education: Educational Psychology, Teaching & Learning, 1993  
University of California, Santa Barbara

M.A., Education, 1991  
University of California, Santa Barbara

B.A., Liberal Studies, Psychology, 1987  
California State University, Long Beach

Multiple Subjects Teaching Credential, 1987  
California State University, Long Beach

**SELECTED PROFESSIONAL POSITIONS****Boise State University**

Chair, Dept. of Educational Technology 2006-11

Professor, 2008-present

Associate Professor, 2006-08

Visiting Associate Professor, 2005-06

**Sonoma State University**

Associate Professor &amp; EdTech Program Coordinator, 1998-2000

**University of Memphis**

Assistant Professor, 1993-98 (promoted and tenured 1998)

Elementary Education Coordinator, 1997-98

**COURSES TAUGHT (PAST SIX SEMESTERS ONLY)**

Instructional Design

Online Course Design

Social Network Learning

**SELECTED REFEREED PUBLICATIONS (2005-2011)**

Richter, J. & Dawley, L . (2010). Creating context for educational research in virtual worlds: An invitation to dialogue. *International Journal of Gaming and Computer-Mediated Simulations*, 2(1).

Rice, K. & Dawley, L . (2009). The status of professional development for K-12 online teachers: Issues and implications. *Journal of Technology and Teacher Education*, 17 (4), 523-545.

Dawley, L . (2009). Social network knowledge construction: Emerging virtual world pedagogy . *On The Horizon* 17 (2), 109-121.

Rice, K. & Dawley, L . (2008). Professional development for K-12 online teachers: Where do we go from here? *Technology and Teacher Education Annual* , 19 (1), 667-673.

**SELECTED NON-REFEREED PUBLICATIONS (2005-2011)**

Dawley, L. & Rice, K. (2011). *Idaho's online learning requirement: Options & implications*. Report prepared for the Idaho State Board of Education.

Dawley, L. (2010). In T. Carroll (Chair) & P. Resta (Chair), *Redefining teacher education for digital age learners*. Report from the Invitational Summit on Redefining Teacher Education for Digital-Age Learners, Austin, Texas. Retrieved from <http://www.redefineteachered.org/> (contributor to section on National Level Policies).

Dawley, L. (2010). *Research roundup: online learning, a quick reference on the science behind virtual schooling*. Report prepared for Edutopia, George Lucas Foundation. Retrieved from <http://www.edutopia.org/stw-online-learningresearch-roundup>.

Dawley, L. & Rice, L. (2010). *2009-10 Idaho INSPIRE Connections Academy dissemination grant final evaluation*. Report prepared for the Idaho State Board of Education.

## SELECTED BOOKS OR BOOK CHAPTERS

Dawley, L. (2007). *The tools for successful online teaching*. Hershey, PA: IGI Global, Inc.  
Morrison, G., Lowther, D. & DeMeulle, L. (2000). *Integrating computer technology into the classroom*. Upper Saddle River, NJ: Merrill Inc.

## SELECTED PRESENTATIONS (2005-2011): Invited Keynotes

Dawley, L. (2011, June). *Promoting teen leadership through quest-based learning: a engaging tale*. Invited keynote speaker at the Games & Learning SIG, International Society for Technology in Education, Philadelphia, PA.

Dawley, L. (2011, April). *The importance of serendipity in educational innovation*. Invited keynote speaker at the Iowa Distance Learning Association, IA.

Dawley, L. (2011, March). *Research roundup in online learning: From theory to practice to the future*. Invited speaker at the 2011 Cyber Learning Conference, Texas A&M University, TX.

Dawley, L. (2010, October). *Educational research across a spectrum of virtuality: Today and tomorrow*. Invited keynote speaker at the Northern Rocky Mountain Educational Research Association, Big Sky, MT.

## SELECTED SERVICE TO UNIVERSITY, STATE, NATIONAL, OR INTERNATIONAL UNITS (2005-2011)

### University

Provost Search Committee, 2011  
President's Task Force on Technology, Teaching & Learning, 2011  
Assoc. Vice President of Information Technology Search Committee, 2010

### College

Dean's Leadership Team, 2005-11  
NCATE Taskforce, 2009-10

### Department

Department chair, 2005-11

### Professional

Co-Founder, Program Chair & Chair, Applied Research in Virtual Environments for Learning Special Interest Group (ARVEL SIG), American Educational Research Association, 2006-11

Founding Co-Chair, Mobile Learning SIG, Society of Information Technology & Teacher Education, 2010-11

**Yu-Chang Hsu, Ph.D.**

Assistant Professor

hsu@boisestate.edu

<https://sites.google.com/site/yuchanghsuportfolio/>

(208) 286-8446

328 Education Building

**EDUCATION****Ph.D., Instructional Systems** (Minor: Educational Psychology)

The Pennsylvania State University, 2009.

**Ed.M., Education and Technology**

State University of New York at Buffalo, 2005.

**Ed.M., Teaching English to Speakers of Other Languages (TESOL)**

State University of New York at Buffalo, 2003.

**B.A., English**

National Taiwan Normal University, 1999.

**SELECTED PROFESSIONAL POSITIONS****Boise State University****Assistant Professor**, Department of Educational Technology (2010–present)**Penn State University****Postdoctoral scholar/Assessment Coordinator**, Toys and Mathematical Options for Retention in Engineering (Toys 'n MORE) Project (NSF STEP Grant DUE # 0756992), College of Engineering, Penn State University, 2010.**Assessment Coordinator**, Toys and Mathematical Options for Retention in Engineering (Toys 'n MORE) Project, College of Engineering (2008-2009)**Technology Learning Consultant**, Education Technology Service (ETS) (2007-2008)**Hujiang Senior High School (Taipei, Taiwan)**

English Teacher/Homeroom Teacher (2000-2001)

**Chien Kuo Senior High School (Taipei, Taiwan)**

English Teacher/Homeroom Teacher (1999-2000)

**COURSES TAUGHT****Boise State University**

EDTECH 506: Instructional Message Design [Instructor, Online/Moodle/Partial Redesign/Mobile Learning] (Spring 2011)

EDTECH 561: Research in Educational Technology [Instructor, Online/Moodle/Partial Redesign] (Fall 2010)

**Penn State University**

INSYS 525: Instructional Design Models, Strategies, and Tactics [Co-Instructor, face to face] (Spring 2008)

EDTEC448: Using the Internet in the Classroom [Co-Instructor, online] (Summer 2008)

### SELECTED REFEREED PUBLICATIONS (2005-2011)

1. Ching, Y. -H., & **Hsu, Y. -C.** (accepted). Design-grounded Assessment: A framework and a case study of Web 2.0 activities in higher education. *Australasian Journal of Educational Technology*.
2. Lin, H., Ching, Y. -H., **Hsu, Y. -C.**, Dwyer, F. M. (2010). Learning from animation: The effect of prior knowledge and navigation mode. *International Journal of Instructional Media*, 37 (2), 201-212.
3. **Hsu, Y. -C.**, Ching, Y. -H., Mathews, J. P., & Carr-Chellman, A. A. (2009). Undergraduate students' self-regulated learning in web-based learning environments. *Quarterly Review of Distance Education*, 10(2), 109-122.
4. **Hsu, Y. -C.**, Lin, H., Ching, Y. -H., & Dwyer, F. (2009). The effects of assigned and preferred educational website navigation modes on undergraduate students' learning outcomes. *Journal of Educational Technology & Society*, 12(1), 271-284.
5. **Hsu, Y. -C.** (2006). Better educational website interface design: The implications from gender-specific preferences in graduate students. *British Journal of Educational Technology* 37(2), 233-242.

### SELECTED NON-REFEREED PUBLICATIONS (2005-2011)

1. **Co-author** (2010). Toys and Mathematical Options for Retention in Engineering (Toys 'n MORE): Year 2 annual report. [NSF STEM Talent Expansion Grant, # 0756992; PI: Dr. Renata Engel]
2. **Co-author** (2009). Toys and Mathematical Options for Retention in Engineering (Toys 'n MORE): Year 1 annual report. [NSF STEM Talent Expansion Grant, # 0756992; PI: Dr. Renata Engel]

### SELECTED BOOKS OR BOOK CHAPTERS

1. **Hsu, Y. -C.**, Ching, Y. -H., & Grabowski, B. (proposal accepted; manuscript under review). Web 2.0 Applications, Practices, and Technologies for Learning through Collaboration. In M. Spector, D. Merrill, J. Elen, & M. J. Bishop (Eds.). *Handbook of research on educational communications and technology* (4th ed.). Springer Academics.
2. **Hsu, Y. -C.**, Ching, Y. -H., & Grabowski, B. (2009). The spirit of educational Web 2.0 literacy: Cognitive tools of the new media age for K-12. In T. WHL & R. Subramaniam (Eds.), *Handbook of research on new media literacy at the K-12 level: Issues and challenges* (pp. 353-371). Hershey, PA: IGI Global.

### SELECTED PRESENTATIONS (2005-2011)

1. **Hsu, Y. -C.**, & Ching, Y. -H. (2010). Learning statistics with cognitive and metacognitive strategies facilitating multiple external representations integration in a web-based environment. The proceedings of Association for Educational Communications and Technology (AECT) Annual International Convention, Anaheim, California. October 27-30, 2010.
2. Ching, Y. -H., & **Hsu, Y. -C.** (2010). Blogging in higher education: Issues, challenges, and design considerations. The proceedings of Association for Educational Communications and Technology (AECT) Annual International Convention, Anaheim, California. October 27-30, 2010.
3. Margle, J., Gomez-Calderon, J., **Hsu, Y. -C.**, Freeman, A. Sathianathan, D., and Engel, R. (2010). Toys and Mathematics Options for Retention in Engineering (Toys 'n MORE) broad

impact: The Campuses. The proceedings of 2010 ASEE Annual Conference and Exposition, Louisville, Kentucky, June 20-23, 2010.

4. Ching, Y. -H., & Hsu, Y.-C. (2010). Strategy training that facilitates undergraduate students in representing and solving ill-structured problems. The proceedings of American Educational Research Association (AERA) Annual Meeting and Exhibition, Denver, Colorado, USA, April 30-May 4, 2010.
5. Hsu, Y. -C., Ching, Y. -H., Grabowski, B. (2008). Bookmarking/tagging in the web 2.0 era: from an individual cognitive tool to a collaborative knowledge construction tool for educators. The proceedings of World Conference on E-Learning in Corporate, Government, Health, & Higher Education, Las Vegas, Nevada, USA, November 17-21, 2008.

## SELECTED SERVICE TO UNVIERSITY, STATE, NATIONAL, OR INTERNATIONAL UNITS (2005-2011)

### University

- Foundations Program Committee, Boise State University (2011)

### Professional

1. **Consulting Editor**, *Educational Technology Research and Development* (2009-present)
2. **Refereeing Panel**: *British Journal of Educational Technology* (2009-present)
3. **Journal Manuscript Reviewer**
  - *Instructional Science* (2009-present)
  - *Learning and Instruction* (2009-present)
  - *Computers and Education* (2009-present)
4. **Research Collaborator**, Online Learner Competencies by ibstpi. The International Board of Standards for Training, Performance and Instruction (ibstpi) (2010)



**Jui-Long Hung, Ed.D.**

Assistant Professor

andyhung@boisestate.edu

<http://edtech2.boisestate.edu/hungj/web/>

208-426-5542

E327

**EDUCATION**

- 2004-2007     **Ed.D. Instructional Technology with Minor in Information Systems**  
Texas Tech University - Lubbock, Texas
- 1994-1996     **MBA, Management Information System Concentration**  
National Sun Yat-Sen University, Kaohsiung, Taiwan
- 1989-1993     **B.S., Biology**  
National Cheng Kung University, Tainan, Taiwan

**SELECTED PROFESSIONAL POSITIONS**

- 2008-Current     **Assistant Professor**  
*Boise State University, Department of Educational Technology*  
*College of Education – Boise Idaho*
- 2007-2008     **Visiting Professor**  
*Boise State University, Department of Educational Technology*  
*College of Education – Boise Idaho*
- 2006-2007     **Instructor**  
*Texas Tech University, Educational and Instructional Technology Program,*  
*College of Education – Lubbock Texas*
- 2004-2006     **Research Assistant**  
*Texas Tech University, Educational and Instructional Technology Program,*  
*College of Education – Lubbock Texas*
- 2000-2004     **Lecturer**  
*Kun Shan University, Department of Information Systems,*  
*College of Business Administration, Tainan Taiwan*
- 1997-2004     **Lecturer**  
*Kun Shan University, Department of Accounting Information,*  
*College of Business Administration, Tainan Taiwan*

**COURSES TAUGHT (PAST SIX SEMESTERS ONLY)**

EDTECH 502 Internet for Educators  
EDTECH 503 Instructional Design  
EDTECH 511 Interactive Courseware Development  
EDTECH 552 Introduction to Network Administration

**SELECTED REFEREED PUBLICATIONS (2005-2011)**

Hung, J. L. & Zhang, K. (in press). Examining Mobile Learning Trends 2003-2008: A Categorical Meta-trend Analysis Using Text Mining Techniques. *Journal of Computing in Higher Education*.  
<http://www.springerlink.com/content/m32311r618q75048>

- Hung, J.L. (in press). Trends of e-learning research from 2000-2008: use of text mining and bibliometrics. *British Journal of Educational Technology (SSCI, impact factor 1.255)*, <http://onlinelibrary.wiley.com/journal/10.1111/%28ISSN%291467-8535/earlyview>
- Hung, J. L., Crooks, S. (2009). Examining online learning patterns with data mining techniques in peer-moderated and teacher-moderated course. *Journal of Educational Computing Research (was in the SSCI)*, 40(2), 183-210.
- Zhang, K., & Hung, J. L. (2009). E-learning in supplemental educational systems in Taiwan: present status and future challenges, *International Journal on E-Learning: Corporate, Government, Healthcare, & Higher Education*, 8(4), 479-494.
- Zhang, K., Peng, S. W. & Hung, J. L. (2009). Online collaborative learning in a project-based learning environment in Taiwan: a case study on undergraduate students' perspectives. *Educational Media International (In the SSCI Candidate List)*, 46(2), 123-135.
- Hung, J. L. & Zhang, K (2008). Revealing online learning behaviors and activity patterns and making predictions with data mining techniques in online teaching. *Journal of Online Learning and Teaching*, 4(4), 426-437. [http://jolt.merlot.org/vol4no4/hung\\_1208.pdf](http://jolt.merlot.org/vol4no4/hung_1208.pdf)
- Hung, J. L., Randolph-Seng, B., Kittikunanant, M. & Crooks, S. M. (2008). Multimedia e-learning: computer-based instruction and cognitive load. *Academic Exchange Quarterly*, 12(4), 207-212.
- Zhang, K., & Hung, J. L. (2006). E-learning in Taiwan: policies, practices, and problems. *International Journal of Information and Communication Technology Education*. 2(1), 137-52.
- Zhang, K., & Hung, J. L. (2005). Taiwan higher education's e-learning: status and critical reflections. *New Waves: Educational Research & Development*, 10(3), 24-30.

### **SELECTED PRESENTATIONS (2005-2011)**

- Hung, J. L., Rice, K., & Saba, A. (2011, November). A decision support system model for online teaching and learning. Paper will be presented at the annual meeting of Association for Educational Communications and Technology. Jacksonville, FL.
- Rice, K. & Hung, J. L. (2011, April). Developing a Customized Data Mining Model for Online Professional Development. Paper presented at the annual meeting of American Educational Research Association. New Orleans, Louisiana.
- Zhang, K., Hung, J. L., & Gao, F. (2010, October). Promoting problem solving in online collaborative learning: A mixed-method study in Taiwan. Paper presented at the annual meeting of Association for Educational Communications and Technology. Anaheim, CA.
- Hung, J. L. (2010, July). Using learning patterns for personalized instructional design. Paper accepted for presentation at the Annual Meeting of International Conference on Learning (Learning 2010), Hong Kong Institute of Education, Hong Kong, China.
- Hung, J. L. (2010, June). Data mining application in virtual world: a case study. Paper accepted for presentation at the Annual Meeting of International Workshop of Electronic Payment and Electronic Commerce and International Symposium on Financial Business Intelligence and Risk Management (FIRM-EPECC 2010), Southwestern University of Finance and Economics, Chengdu, China.
- Hung, J. L. (2009, June). ERP research from 2003 to 2009: a study of meta-trend analysis using text mining techniques. Paper presented at the annual meeting of International Workshop of Electronic Payment and Electronic Commerce and International Symposium on Financial Business

Intelligence and Risk Management, Southwestern University of Finance and Economics, Chengdu, China.

Hung, J. L. & Zhang, K. (2009, April). Mining Topic Taxonomies of the Distance Education Literature with Text-Mining Techniques. Paper presented at the annual meeting of American Educational Research Association: Disciplined Inquiry: Education Research in the Circle of Knowledge, San Diego, CA.

Hung, J. L. & Snelson, C. (2008, November). Analyzing trends of e-learning research with text mining techniques. Paper presented at the annual meeting of Association for Educational Communications and Technology. Orlando, FL.

Hung, J. L. & Snelson, C. (2008, March). Mining Longitudinal E-Learning Research: Trends and Patterns. Paper presented at the annual meeting of Society for Information Technology & Teacher Education International Conference, Las Vegas, NE.

Zhang, K. & Hung, J. L. (2007, June). E-learning in supplemental educational systems in taiwan: status & challenges. Paper presented at the annual meeting of ED-MEDIA: World Conference on Educational Multimedia, Hypermedia, & Telecommunications, Vancouver, Canada.

Hung, J. L. & Zhang K. (2007, April). Revealing online learning behaviors with data mining techniques. Paper presented at the annual meeting of American Educational Research Association: The World of Educational Quality, Chicago, IL

Hung, J. L. & Zhang K. (2006, October) Data mining applications to online learning. Paper presented at the annual meeting of World Conference on E-Learn in Corporate, Government, Healthcare, and Business, Honolulu, Hawaii, USA.

Hung, J. L., Kittikunanant M. & Crooks, S. (2006, October) Effects of an electronic performance support system on computer-based software learning: a mixed-method study. Paper presented at annual meeting of Association for Educational Communications and Technology. Dallas, TX.

Hung, J. L., Kittikunanant M., Crooks, S. & Zhang K., (2006, Jane). The proper position of conceptual information during computer-based software training. Paper presented at annual meeting of the World Conference on Education Multimedia, Hypermedia, and Telecommunication, Orlando, FL.

Zhang, K., Hung, J. L., & Peng, S. (2005, October). Moderating online collaborations during various tasks in a project-base learning environment. Paper presented at the annual meeting of the Association for Educational Communications and Technology, Orlando, FL.

Zhang, K., & Hung, J. L. (2005, October). E-learning in Taiwan's higher education: policies, practice and problems. Paper presented at the annual meeting of the Association for Educational Communications and Technology, Orlando, FL.

Zhang, K., & Hung, J. L. (2005, April). E-learning in Taiwan: issues with technology. Paper presented at the annual meeting of Chinese American Educational Research and Development Association, Montreal, Canada.

#### **EXTERNAL COMPETITIVE GRANTS (FUNDED ONLY)**

Hung, J. L., Hsu, Y. C., & Rice, K. (2010). *IDLA student evaluation*, Idaho Digital Learning Academy. \$18,000.

Hung, J. L., Yang, D., & Rice, K. (2010). *State-wide teacher evaluation training*, Idaho State Department of Education. Pending: \$32,000.

Rice, K. & Hung, J. L. (2009). *Idaho state-wide professional development*. State of Idaho. Funded: \$10,000, Pending: \$20,000.

## **SELECTED SERVICE TO UNVIERSITY, STATE, NATIONAL, OR INTERNATIONAL UNITS (2005-2011)**

### **State**

2010: ETS Technology Education Certificate Panelist.  
2009: Idaho Education Network (IEN) RFP Review Board.

### **University**

2008 - Current: Dual Degree Program with National University of Tainan, Boise State University.  
2009 - Current: Web Master - English Language Support Programs (<http://www.boisestate.edu/esl/>), Boise State University, Boise, Idaho.

### **College**

2010: Database Administrator - Professional Education Management System, College of Education, Boise State University  
2010: System Developer – Student Admission Management System, College of Education, Boise State University  
2009: Database Analyst & Presenter – NCATE Accreditation, College of Education, Boise State University.

### **Department**

#### **Chair**

2011 - Current: New EdTech Website Migration, Department of Educational Technology, Boise State University.  
2010 – Current: EdTech Website Overseeing, Department of Educational Technology, Boise State University.  
2008 - Current: Chair – Dual Degree Program, Department of Educational Technology, Boise State University.  
2008 - Current: Coordinator – Certificate of School Technology Coordinator, Department of Educational Technology, Boise State University.

### **Conference**

2010 - 2011: Conference Chair - Annual Meeting of International Workshop of Electronic Payment and Electronic Commerce and International Symposium on Financial Business Intelligence and Risk Management (FIRM-EPECC 2011)  
2009 - 2011: Session Chair - International Workshop of Electronic Payment and Electronic Commerce and International Symposium on Financial Business Intelligence and Risk Management (FIRM-EPECC 2009, 2010, and 2011), Southwestern University of Finance and Economics, Chengdu, China.

### **Journal**

2008 - Current: Editor - Continental Journal Education Research (<http://www.wiloludjournal.com/ojs/index.php/cjedures>).  
2009 - Current: Reviewer – British Journal of Educational Technology.  
2008 - Current: Reviewer - Journal of Educational Computing Research.

### **Research Center**

2007 - Current: Oversea Researcher & Adjunct Professor, Center of Financial Intelligence and Engineering, School of Economic Information Engineering, Southwestern University of Finance and Economics, Chengdu, China.  
2007 – Current: Researcher, Center for Advanced Analytics and Business Intelligence, The Rawls College of Business Administration, Texas Tech University, Texas USA.

**Ross A. Perkins, Ph.D.**

Assistant Professor

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E312

**EDUCATION**

Ph.D., Instructional Technology (2003)

Virginia Polytechnic Institute and State University, Blacksburg, VA

M.A.Ed., Instructional Technology, (1999)

Virginia Polytechnic Institute and State University, Blacksburg, VA

B. A., English and Secondary Education; French minor (1994)

Liberty University, Lynchburg, VA

A.A., Humanities (1991)

Manatee Community College, Bradenton, FL

**SELECTED PROFESSIONAL POSITIONS**

Assistant Professor, Educational Technology (2008 – present)

Department of Educational Technology, Boise State University, Boise, ID

Senior Project Associate; Instructor (2004-2008)

Office of Educational Research and Outreach; Teaching &amp; Learning , Virginia Tech, Blacksburg, VA

Post-doctoral Fellow; Instructor (2003-2004)

Center for Instructional Technology Solutions in Industry and Education, Virginia Tech, Blacksburg, VA

Graduate Assistant; Instructional Designer (2000-2003)

Teaching &amp; Learning (Instructional Technology program), Virginia Tech, Blacksburg, VA

Program Support Technician, Sr. (1999-2000)

Department of Physics, Virginia Tech. Blacksburg, VA

English Instructor, Grades 8-12 &amp; Director Public Relations (1994-1999)

Hargrave Military Academy, Chatham, VA

**COURSES TAUGHT (PAST SIX SEMESTERS ONLY)**

EDTECH 505 "Evaluation for Educational Technologists"

EDTECH 597 "International Perspectives in ICT"

EDTECH 504 "Theoretical Foundations of Educational Technology"

EDTECH 503 "Instructional Design"

**SELECTED REFEREED PUBLICATIONS (2005-2011)**

Perkins, R. A. (accepted). Using research-based practices to increase response rates of web-based surveys. Submitted March 2010 to *EDUCAUSE Quarterly*.

- Perkins, R. A. (in review). Considering the challenges of Open Educational Resources through Rogers' Theory of Perceived Attributes. Submitted December 2010 to the *Turkish Online Journal of Educational Technology*.
- Snelson, C. & Perkins, R.A. (2009). From silent film to YouTube: Tracing the historical roots of motion picture technologies in education. *Journal of Visual Literacy*, 28(1), 1-27.
- Perkins, R. A. (2009). Context-oriented instructional design for course transformation. *New Directions for Teaching and Learning*, 118. 85-94. doi 10.1002/tl.355
- Perkins, R. A., Gwayi, S. M., Zozie, P. A., & Lockee, B. B. (2005). Distance education in Malawi. *Educational Technology Research and Design*, 53(4), 101-107.

### SELECTED NON-REFEREED PUBLICATIONS (2005-2011)

- Perkins, R. A. (in press). A brief review of international e-learning standards. *TechTrends*, 55(4).
- Perkins, R. A. (2011). A walling out of open and distance education. *TechTrends*, 55(2), 25-26.
- Perkins, R. A. (2010). Reflections on relief: Open educational resources. *TechTrends*, 54(3), 14-15.
- Perkins, R. A. (2009). ICT Scholars without borders: Encouraging graduate research abroad. *TechTrends*, 53(4), 17-18.
- Perkins, R. A. (2008). Challenges and questions regarding "culturally sensitive design." *TechTrends*, 52(5). 19-21.
- Perkins, R. A. & Arreguin, C. (2007). Real life migrants on the MUVE: Actual stories of virtual transitions. *Learning & Leading with Technology*, 34(8), 16-20.

### SELECTED BOOKS OR BOOK CHAPTERS

- Perkins, R. A., Burton, J. K., & Lockee, B. B. (2005). Building human capacity in Malawi: Contextual considerations in instructional technology project implementation. In M. A. Fitzgerald, M. Orey & R. M. Branch (Eds.), *Educational Media & Technology Yearbook 2005* (Vol. 30, pp. 150-158). Westport, CT: Libraries Unlimited.
- Zozie, P. A., Sanga, M. W., Gwayi, S. M., Nyirongo, N. K., Perkins, R. A., & Lockee, B.B. (2004). Establishment of distance education for secondary school teachers in Malawi, Africa: A national needs assessment. In M. A. Fitzgerald, M. Orey & R. M. Branch (Eds.), *Educational Media & Technology Yearbook 2004* (Vol. 29, pp. 51-60). Westport, CT: Libraries Unlimited.
- Snider, R., Perkins, R. A., Holmes, G. A., & Lockee, B. B. (2002). A systematic approach to determining the scalability of a distance education program. In M. A. Fitzgerald, M. Orey & R. M. Branch (Eds.), *Educational media and technology yearbook* (Vol. 28, pp. 122-138). Englewood, CO: Libraries Unlimited.

### SELECTED PRESENTATIONS (2005-2011)

- Perkins, R. A., & Bond, L. (2011). Effects of personalization of email and email content length on web-based survey response. Paper presented at the 2011 American Educational Research Association Conference, New Orleans, LA.

- Lockee, B. B., Perkins, R. A., Burton, J. K., & Potter, K. (2011). Defining quality in distance education: Examining national and international standards for online learning. Poster session presented at the 2011 American Educational Research Association Conference, New Orleans, LA.
- Perkins, R. A. & Singletary, T. J. (2011). An investigation into how K-8 teachers use web-based science education resources. Paper presented at the 2011 National Science Teachers Association Annual Conference, San Francisco, CA.
- Perkins, R. A. (2010). Promises and Challenges of Open Educational Resources. Paper presented at the 2010 Association for Educational Communications and Technology Annual Conference, Anaheim, CA.
- Perkins, R. A. & Singletary, T. J. (2010). An investigation into the use and evaluation of web-based science education resources by K-8 teachers (Part 1). Paper to be presented at the 2010 Association for Educational Communications and Technology Annual Conference, Anaheim, CA.
- Perkins, R. A. (2010). Considering the challenges of Open Educational Resources through Rogers' Theory of Perceived Attributes. Paper presented at the International Symposium on Open and Distance Learning & International Council of Educational Media Joint Conference 2010. Eskişehir, Turkey: Anadolu University
- Perkins, R. A. (2008). Digitizing ecological sustainability: Lessons from the "Swiss International Teachers Program. Paper presented at the Association for Educational Communications and Technology Annual Conference, Orlando, FL.
- Perkins, R. A. (2008). SOLVE Island: Teacher and student uses and perceptions of Teen Second Life. Paper presented at the Association for Educational Communications and Technology Annual Conference, Orlando, FL.
- Lockee, B. B., Nyirongo, N., Perkins, R. A., Sanga, M., Burton, J., & Gwayi, S. (2008). Adaptation and distance delivery of instructional technology programs for developing countries. Paper presented at the Association for Educational Communications and Technology Annual Conference, Orlando, FL.

#### **EXTERNAL COMPETITIVE GRANTS (FUNDED ONLY)**

National Science Foundation: Engineering Education Directorate. *Successful Adoption of Innovation in Engineering Education: Faculty Characteristics and Environmental Perceptions*. Awarded: \$144,002.00  
PI: Kirsten Davis (Construction Management). Co-PI's: Ross Perkins, (Educational Technology) & Sondra Miller (Civil Engineering)

National Science Foundation: GeoSciences Directorate. *Virtual Labs for Geochronology (for 8th Grade Earth Science)*. Awarded: \$149,895.00. PI: Karen Viskupic (Geoscience). Co-PI's: Ross Perkins (Educational Technology), Chareen Snelson (Educational Technology), & Mark Schmitz (Geosciences).

#### **SELECTED SERVICE TO UNVIERSITY, STATE, NATIONAL, OR INTERNATIONAL UNITS (2005-2011)**

University	University Information Technology Advisory Committee (2008-present); President's Task Force for Teaching & Learning with Technology
College	Technology committee (2009 – present); NCATE Teacher Education Assessment Group (2009-2010); Teacher Education Coordinating Council (2009-present)
Department	Program Coordinator, M.S. in Educational Technology; Ed.D. in Curriculum & Instruction; Educational Technology emphasis; Advisor to EDTECH Graduate Student Association

- National      Contributing Editor (2007 – present), TechTrends ; Consulting Editor, Editorial Review Board (2010 – present), Educational Technology Research & Development; Member, Editorial Review Board (2008 – present), Journal for Computing Teachers
- International      Association for Educational Communications and Technology (AECT) Ethics Committee (July 2010 – present); AECT Board Presidential Nominations Committee (Oct. 2009 – present); President (Oct. 2009 – Oct. 2010): International Division of AECT.  
Communications Officer (2003 – 2008): International Division of AECT.



**Kerry L. Rice, Ed. D.**

Associate Professor and Associate Chair

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<http://edtech.boisestate.edu/krice>

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E 306

**EDUCATION****2006: Ed.D. Curriculum and Instruction**

Boise State University – Boise, Idaho

**2002: MS Educational Technology**

Boise State University – Boise, Idaho

**1991: BA Elementary Education**

Boise State University – Boise, Idaho

**1982: AA Business**

Glendale Community College – Glendale, Arizona

**SELECTED PROFESSIONAL POSITIONS****2010 – Current: Associate Professor & Associate Chair***Boise State University, Department of Educational Technology  
College of Education – Boise Idaho***2006 – 2010: Assistant Professor***Boise State University, Department of Educational Technology  
College of Education – Boise Idaho***2003 – 2006: Instructor/Online Instructional Designer***Boise State University, Department of Educational Technology  
College of Education – Boise Idaho***2002 – 2003: Instructor /PT3 Grant Coordinator***Boise State University , Department of Educational Technology  
College of Education – Boise Idaho***2001 – 2003: Graduate Assistant and Adjunct Faculty***Boise State University , Department of Educational Technology  
College of Education – Boise, Idaho***1996 – 1999: Teacher/7 th Grade Algebra and Prealgebra***Weis Middle School – Galveston, Texas***1991 – 1995: Teacher/6 th Grade Math, Science and Reading***Meridian Middle School – Meridian, Idaho***COURSES TAUGHT (PAST SIX SEMESTERS ONLY)**

2011 Spring: EDTECH 596: Independent Study: Legal Issues Surrounding Social Networks in Schools

2010 Fall: EDTECH 521: Teaching Online in the K-12 Environment (online)

2010 Fall: EDTECH 596: Independent Study: Research Protocols in Online Learning

2010 Summer: EDTECH 596: Independent Study: Best Practices in Online Learning

2010 Spring: EDTECH 523: Advanced Online Teaching Methods (online) - 2 sections

2009 Fall: EDTECH 504: Theoretical Foundations of Educational Technology (online) - 2 sections  
 2009 Summer: EDTECH 504: Theoretical Foundations of Educational Technology (online) - 2 sections  
 2009 Spring: EDTECH 504: Theoretical Foundations of Educational Technology (online)  
 2009 Spring: EDTECH 523: Advanced Online Teaching (online)  
 2009 Spring: EDTECH 596: Independent Study: PBL Project Management

### SELECTED REFEREED PUBLICATIONS (2005-2011)

- Snelson, C., Rice, K., & Wyzard, C. (2011). Research priorities for YouTube and video-sharing technologies: A Delphi study. *British Journal of Educational Technology*.
- Wyzard, C., Snelson, C. & Rice, K. (2010). Looking Ahead at YouTube Research. In *Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications 2010* (pp. 3797-3802). Chesapeake, VA: AACE.
- Rice, K., & Dawley, L. (2009). The status of professional development for K-12 online teachers: Insights and implications. *Journal of Technology and Teacher Education*, 17(4), 523-545.
- Rice, K. L. (2009). Priorities in K-12 distance learning: A Delphi study examining multiple perspectives on policy, practice, and research. *Journal of Educational Technology and Society*, 12(3), 163-177.
- Dawley, L. & Rice, K. (2009, January). The unique needs and challenges of K-12 online teachers: Where do we go from here? *Hawaii International Conference on Education Conference Proceedings*, Honolulu.
- Rice, K. & Vakili-Hutchison, D. (2008). Teaching online: Meeting the challenge with emerging strategies for effective professional development. In G. Richards (Ed.), *Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2008* (p. 1198). Chesapeake, VA: AACE.
- Rice, K. & Dawley, L. (2008). Professional development for K-12 online teachers: Where do we go from here? *Technology and Teacher Education Annual*, 19(1), 667-673.
- Ransdell, L. B., Rice, K., Snelson, C., & DeCola, J. (2008). Online health-related fitness courses: A wolf in sheep's clothing or a solution to some common problems? *The Journal of Physical Education, Recreation, and Dance (JOPERD)*. 79(1), 45-52.
- Dawley, L. & Rice, K. (2008, January). Professional development for K-12 online teachers: What do we know? *Hawaii International Conference on Education Conference Proceedings*, Honolulu.
- Mergendoller, J., Rice, K., Searson, M., Schmidt, D. & Ravitz, J. (2007). Using PBL-Online in educational technology graduate programs, professional development and international collaboration. In R. Carlsen et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2007* (pp. 2056-2057). Chesapeake, VA: AACE.
- Rice, K. L. (2006). A comprehensive look at distance education in the K-12 context. *Journal of Research on Technology in Education*, 38(4), 425-448.

### SELECTED NON-REFEREED PUBLICATIONS (2005-2011)

- Dawley, L., Rice, K., & Hinck, G. (2010). Going Virtual! 2010: The status of professional development and unique needs of K-12 online teachers. White paper prepared for the International Association for K-12 Online Learning. Washington, DC.
- Dawley, L. & Rice, K. (2010). 2008-10 Idaho INSPIRE Connections Academy dissemination grant evaluation report. Report prepared for the Idaho State Board of Education. Boise, ID.

- Rice, K. & Hung, J. L. (2010). *2009-2010 Idaho state-wide professional development grant: Idaho online professional development evaluation report*. Report prepared for the Idaho State Department of Education.
- Dawley, L. & Rice, K. (2009). *2008-09 Idaho INSPIRE Connections Academy dissemination grant interim evaluation*. Report prepared for the Idaho State Board of Education. Boise, ID.
- Rice, K., & Dawley, L. (2008). *Going virtual: Unique needs and Challenges of K-12 Online Teachers*. White paper prepared for the North American Council for Online Learning. Washington, DC.
- North American Council for Online Learning (NACOL). (2007). *Research committee issues brief: Professional development for virtual schooling and online learning*. Washington, DC: Author. [http://www.nacol.org/docs/NACOL\\_PDforVSandOlnLrng.pdf](http://www.nacol.org/docs/NACOL_PDforVSandOlnLrng.pdf)
- Rice, K., & Dawley, L. (2007). *Going virtual: The status of professional development for K-12 online teachers*. White paper prepared for the North American Council for Online Learning. Washington, DC.

### SELECTED BOOKS OR BOOK CHAPTERS

- Rice, K. (in press). *Making the move to k-12 online teaching: Research-based strategies and practices*. Upper Saddle River, NJ: Pearson Education.
- Bangert, A. & Rice, K. (2009). What we know about assessing online learning in secondary schools. In L. T. W. Hin & R. Subramaniam (Eds.), *Handbook of research on new media literacy at the K-12 level*, Eds. US: Hershey.

### SELECTED PRESENTATIONS (2005-2011)

- Rice, K., & Hung, J. L. (2011, March). Developing a customized data mining model for online professional development. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans.
- Dawley, L., Rice, K., & Hinck, G. (2010). Going Virtual! 2010: The status of professional development and unique needs of K-12 online teachers. White paper presentation at the *International Association for K12 Online Learning, Virtual School Symposium*, Glendale, AZ.
- Rice, K. (2010, May). Using Constructivist Learning Theories to Inform Practice in Online Environments. Paper presentation for the *9th Annual International Conference Educational Technologies – Tradition, Present, Predictable Future*, Nicolaus Copernicus University, Torun, Poland.
- Rice, K. & Dawley, L. (2010, January). Developing an endorsement in K-12 online teaching: Linking research, policy, and practice. Paper presentation for the annual meeting of the *Hawaii International Conference on Education*, Honolulu.
- Rice, K. & Frey. (2009, April). PBL in cyberspace: Let the transformation begin. Concurrent session at the *United States Distance Learning Association Conference*, St. Louis, MO.
- Rice, K. & Dawley, L. (2009, November). Going virtual III: Effective professional development of K-12 online teachers. Paper presentation for the *International Association for K12 Online Learning, Virtual School Symposium*, Austin, TX.
- Rice, K. & Vakili-Hutchison, D. (2008, November). Teaching online: Meeting the challenge with emerging strategies for effective professional development. Paper presented at the *World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2008*, Las Vegas, NV.
- Rice, K. & Dawley, L. (2008, March). Professional development for online K-12 teachers: Where do we go from here? Paper presented at the *Society for Information Technology & Teacher Education (SITE) International Conference*, Las Vegas, NV.

Rice, K. & Dawley, L. (2008, April). Training K12 online teachers: A national perspective. Paper presented at the annual meeting of the *American Educational Research Association*, New York.

Dawley, L. & Rice, K. (2007, April). Training K-12 virtual teachers: A multi-dimensional analysis of their unique needs, best practices, and methodologies. Paper presented at the annual meeting of the *American Educational Research Association*, Chicago.

#### **EXTERNAL COMPETITIVE GRANTS (FUNDED ONLY)**

Hung, J. L., Hsu, Y., & Rice, K. (2010). Student data analysis. Idaho Digital Learning Academy. Funded: \$18,000.

Rice, K. & Hung, J. L. (2009-2010). *Idaho state-wide professional development evaluation - subcontract award*. State of Idaho. Funded: \$10,000.

Dawley, L. & Rice, K. (2009-2010). *INSPIRE charter school program dissemination grant--evaluation sub-contract award*. State of Idaho. Funded: \$17,500.

Rice, K. (2006 - 2008). *Project-based learning online*. The Buck Institute for Education., Navato, CA. Funded: \$96,000

#### **SELECTED SERVICE TO UNIVERSITY, STATE, NATIONAL, OR INTERNATIONAL UNITS (2005-2011)**

##### **University**

2010 – 2011 Department of Educational Technology Associate Chair

2010 - Academic Technology Director Search Committee

2010 – College of Education Dean's Evaluation Committee

2010 - Current: College of Education - TECC

2010 – Current: Department of Educational Technology – Curriculum Committee

2009 - 2010: Department of Educational Technology - Search Committee [Chair]

2009 - Current: College of Education - Salary Equity Committee

2008 - Current: University Curriculum Committee

2008 - Current: Department of Educational Technology – Library Committee [Chair]

2008 - Current: University Quality Matters (QM) Review Team

##### **State, National and International**

2010 - Current: Online K-12 Teaching Endorsement Legislative Task Force

2010 - Current: Pearson Education Blue Ribbon Panel - Professional Online Educator development

2009 - 2010: SRI International, Washington D.C. Technical Working Group

2009 - Current: Reviewer, Journal of Teacher Education (JTE)

2008 - 2010: Idaho Online K-12 Teaching Endorsement Task Force

2008 - 2010: Idaho Online K-12 Teaching Endorsement Standards Development Subcommittee [Chair]

2008 - Current: Reviewer, British Journal of Educational Technology (BJET)

2008 - Current: Reviewer, Journal of Educational Technology and Society (JETS)

2007 - Current: iNACOL Research Committee member [Invited]

2004 - 2006: INSPIRE Academics Virtual Charter School - Founding Board Member, Vice President.

**Chareen Snelson, Ed.D.**

Associate Professor

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E 307

**EDUCATION**

- 2003--Ed.D. Education, Curriculum and Instruction, Boise State University, Boise, ID
- 2000-- M.A. Education, Curriculum and Instruction, Boise State University, Boise, ID
- 1994-- BS.Ed. Secondary Education (Physical Science, Mathematics), University of Idaho, Moscow, ID

**SELECTED PROFESSIONAL POSITIONS**

- 2011--Associate Professor, Boise State University, Department of Educational Technology
- 2006-2011--Assistant Professor, Boise State University, Department of Educational Technology
- 2005-2006--Visiting Assistant Professor, Boise State University, Department of Educational Technology
- 2003-2005--Adjunct Professor, Boise State University, Department of Educational Technology
- 1994-1999, Science/Mathematics Teacher, Gooding Middle School, Gooding ID

**COURSES TAUGHT (PAST SIX SEMESTERS ONLY)**

- EDTECH 592 Portfolio
- EDTECH 533 YouTube for Educators
- EDTECH 502 Internet for Educators

**SELECTED REFEREED PUBLICATIONS (2005-2011)**

Snelson, C., Rice, K., & Wyzard, C. (2011). Research priorities for YouTube and video-sharing technologies: a Delphi study. *British Journal of Educational Technology*. doi: 10.1111/j.1467-8535.2010.01168.x

Snelson, C. (2011). YouTube across the disciplines: A review of the literature. *MERLOT Journal of Online Learning and Teaching*, 7(1), 159-169. Retrieved from [http://jolt.merlot.org/vol7no1/snelson\\_0311.pdf](http://jolt.merlot.org/vol7no1/snelson_0311.pdf)

Morgan, E., Snelson, C., & Elison-Bowers, P. (2010). Image and video disclosure of substance use on social media websites. *Computers in Human Behavior*, 26(6), 1405-1411. doi: 10.1016/j.chb.2010.04.017

Snelson, C., & Perkins, R.A. (2009). From silent film to YouTube: Tracing the historical roots of motion picture technologies in education. *Journal of Visual Literacy*, 28(1), 1-27. Retrieved from [http://www.ohio.edu/visualliteracy/JVL\\_ISSUE\\_ARCHIVES/JVL28\(1\)/28\\_1\\_SnelsonPerkins.pdf](http://www.ohio.edu/visualliteracy/JVL_ISSUE_ARCHIVES/JVL28(1)/28_1_SnelsonPerkins.pdf)

Elison-Bowers, P., Snelson, C., Casa de Calvo, M., & Thompson, H. (2008). Health science students and their learning environment: A comparison of perceptions of on-site, remote-site, and traditional classroom students. *Perspectives in Health Information Management* (5)2, 1 - 17. Retrieved from [http://library.ahima.org/xpedio/groups/public/documents/ahima/bok1\\_036648.html](http://library.ahima.org/xpedio/groups/public/documents/ahima/bok1_036648.html)

Ransdell, L.B., Rice, K., Snelson, C., & DeCola, J. (2008). Online health-related fitness courses: A wolf in sheep's clothing or a solution to some common problems. *Journal of Physical Education, Recreation, and Dance (JOPERD)* 79(1), 45 - 52.

Snelson, C., & Elison-Bowers, P. (2007). Micro-level design for multimedia-enhanced online courses. *MERLOT Journal of Online Learning and Teaching* 3(4), 1 - 12. Retrieved from <http://jolt.merlot.org/documents/snelson.pdf>

- Snelson, C. (2006). Virtual design based research. *Academic Exchange Quarterly* 10(4), 106-110.
- Snelson, C. (2006) Sampling the Web: The development of a custom search tool for research , *LIBRES*, 16(1) Retrieved from <http://libres.curtin.edu.au/libres16n1/index.htm>
- Snelson, C. (2006). Designing dynamic online lessons with multimedia representations. *The ICFAI Journal of Higher Education*, 1(2), 31-38. (Reprinted from *The Journal of Educators Online*, 2(1), Retrieved from <http://www.thejeo.com/Archives/Volume2Number1/V2N1.htm>
- Snelson, C. (2005). Designing dynamic online lessons with multimedia representations. *The Journal of Educators Online*, 2(1), Retrieved from <http://www.thejeo.com/Archives/Volume2Number1/SnelsonFinal.pdf>

### SELECTED NON-REFEREED PUBLICATIONS (2005-2011)

- Snelson, C. (2006, August). Online professional development for teachers: Emerging models and methods [Review of the book *Online professional development for teachers: Emerging models and methods*]. *Teachers College Record*, Retrieved from <http://www.tcrecord.org> ID Number: 12651.

### SELECTED BOOKS OR BOOK CHAPTERS

- Elison-Bowers, P. & Snelson, C. (in press). Ethical challenges of online teaching. In R. E. Landrum and M. A. McCarthy (Eds.), *Teaching Ethically: Addressing the Ethical Challenges Facing Undergraduate Teachers of Psychology*. Washington, D.C.: American Psychological Association.
- Snelson, C. (2009). Web-based video for e-Learning: Tapping into the YouTube phenomenon. In H. Yang and S. Yuen (Eds.), *Collective Intelligence and E-Learning 2.0: Implications of Web-Based Communities and Networking* (pp.147-166). Hershey, PA: IGI Global.

### SELECTED PRESENTATIONS (2005-2011)

- Snelson, C. (2011, March). *Teacher video production: Techniques for educational YouTube movies*. Paper presented at the annual meeting of the Society for Information Technology & Teacher Education International, Nashville, Tennessee.
- Fuller, M., Wyzard, C., Snelson, C. & Rice, K. (2011, March). *Learning from the past: An educational technology content analysis*. Paper presented at the annual meeting of the Society for Information Technology & Teacher Education International, Nashville, Tennessee.
- Wyzard, C., Snelson, C. & Rice, K. (2010, June). *Looking Ahead at YouTube Research*. Paper presented at the World Conference on Educational Multimedia, Hypermedia and Telecommunications, Toronto, Canada.
- Snelson, C. (2010, April). *Virtual movie sets and branching video: Developing interactive educational machinima with Second Life and YouTube*. Paper presented at the Technology, Colleges, and Community Worldwide Online Conference, World Wide Web <http://tcc.kcc.hawaii.edu/2010/tcc/welcome.html>
- Snelson, C. (2010, March). *Mapping YouTube "video playlist lessons" to the learning domains: Planning for cognitive, affective, and psychomotor learning*. Paper presented at the annual meeting of the Society for Information Technology & Teacher Education International, San Diego, California.

### EXTERNAL COMPETITIVE GRANTS (FUNDED ONLY)

- 2010--National Science Foundation Grant (\$149,895 awarded): K-12 *Virtual Labs for Teaching the Science of Geochronology*. Karen Viskupic (PI), Ross Perkins (Co-PI), Mark D. Schmitz (Co-PI), and Chareen Snelson (Co-PI).
- 2006--Buck Institute for Education Grant (\$27,000 awarded): *Project Based Learning Online Co-Laboratory*. Carolyn Thorsen (PI), Chareen Snelson (Co-PI), Kerry Rice (Co-PI).

**SELECTED SERVICE TO UNIVERSITY, STATE, NATIONAL, OR INTERNATIONAL UNITS (2005-2011)***University-Level Service*

- Member of the Academic Grievance Committee, 2008 - 2011
- Member of the Honorary Doctoral Degree Selection Committee, 2008

*College-Level Service*

- Member of the COE Curriculum Committee, 2006-2011
- Member of the Doctoral Management Committee, 2009-2010
- Member of the COE Graduate Program Committee, 2007-2008
- Member of the COE Strategic Planning Committee, 2006-2007

*Department-Level Service*

- Chair of the EDTECH Curriculum Committee, 2009-2011
- Doctoral Program Coordinator, 2010
- M.S. Program Coordinator, 2010
- Adjunct training site development, 2010
- Chair of the Portfolio Subcommittee, 2008
- Chair of the EDTECH Policy Manual Subcommittee 2007-2008
- Member of the EDTECH Tenure Review Committee, 2007 and 2010
- Member of the Ed.D. Planning Committee, 2008-2009
- Member of the EDTECH Faculty Search Committee, 2006-2008
- Graduate Advising (2005 to present)

*Graduate Culminating Activity Supervision*

- Master's Comprehensive Examinations: Total of 22 questions written and 167 answers scored.
- Master's Portfolio Committees: Supervised 81 ePortfolios.
- Master's Project/Thesis Committee Chair: 1 master's project and 4 thesis committees.
- Master's Project Committee Member: Served on 16 master's project committees.
- Master's Thesis Committee Member: Served on 3 thesis committees.
- Doctoral Dissertation Committee Member: Served on 2 doctoral committees.

*Journal Review Panels*

- *British Journal of Educational Technology* (Article reviewer)
- *Computers & Education* (Article reviewer)

*Journal Editorial Panel*

- Feature Editor: Academic Exchange Quarterly special section on Educational Multimedia and Hypermedia, Winter 2007.

*Association for the Advancement of Computing in Education Program Committee Member*

- 2007, 2008, 2009, 2011--AAACE E-Learn, Worldwide Conference in Corporate, Government, Healthcare & Higher Education. (Paper reviewer)
- 2008--AAACE Ed-Media, World Conference on Educational Multimedia, Hypermedia, & Telecommunications. (Paper reviewer)

**Constance Wyzard, Ph.D.***(Formerly Constance Pollard)*

Professor

constancewyzard@gmail.com

208-426-3043

Rm. 311, College of Education, BSU

**EDUCATION**

Ph.D., Administration, Curriculum and Instruction, Specialization in Technology, University of Nebraska, Lincoln, Nebraska, August, 1990

M.A., Curriculum and Instruction, Specialization in Reading, University of Wyoming, Laramie, Wyoming, May, 1975

B.A., English, University of Wyoming, Laramie, Wyoming, January, 1972

**PROFESSIONAL POSITIONS**

Associate Chair, Department of Educational Technology, 2009 – 2010

Professor, Boise State University, 1993 – Current

Assistant Professor, University of Idaho, 1990 – 1992

Instructor, University of Nebraska, 1988 – 1990

Instructor, Summer Reading Clinic, University of Wyoming – 1977- 1980

Grade 4 Teacher, Fernie School District, British Columbia – 1976 – 1981

Resource Room Teacher, Silver Valley, Alberta – 1975 – 1976

Reading Teacher, Laramie Jr. High, Wyoming – 1972 – 1975

**COURSES TAUGHT**

Edtech 501 – Introduction to Educational Technology

Edtech 561 – Research in Educational Technology

**SELECTED REFEREED PUBLICATIONS (2005-2011)**

Pollard, C., & Pollard, R. (2005). Research priorities in educational technology: A delphi study. *Journal of Research on Technology in Education*. 37(3), p. 145 – 160.

Pollard, R., & Pollard, C. (2005). A framework for establishing research themes in educational technology. *International Journal of Technology, Knowledge and Society*, Volume 1, Issue 3, pp.87-90.

Pollard, C., & Pollard, R. (2007). A profile of K-12 Technology Use: A qualitative study. *International Journal of Technology, Knowledge and Society*, Volume 3, Issue 4, pp. 81-88.

Pollard, C. & Pollard, R. (2007). E-Teaching, Learning and Research Tools: RSS Feeds. Proceedings from *E – Learn 2007 World Conference*. Quebec, CA: Quebec City.



- Janio, J, Gomikiewicz, J., Perzycka, E., Pollard, C., Pollard, R., Siemieniceka, D., & Watola, A. (2008). Priorities in Educational Technology Research: A Delphi Study from Poland. *The International Journal of Technology, Knowledge and Society*, Volume 4, Issue 6, pp.23-32.
- Pollard, C., & Pollard, R. (2008). Web 2.0 Strategies for Teaching and Learning. Proceedings from *National Social Science Conference*, Las Vegas, NV, pp. 155-162.
- Pollard, C. & Pollard, R. (2008). Using the Delphi Method for E-Research. Proceedings from *E – Learn 2008 World Conference*. Las Vegas, NV.
- Haskell, C., & Pollard, C. (2008). Understanding and Preparing Teachers of Millennial Learners. Proceedings from *E – Learn 2008 World Conference*. Las Vegas, NV.
- Pollard, C., & Pollard, R. (2009). Web 2.0 strategies for teaching and learning. *National Social Science Journal*, 32(2), 170-175.
- Anderson, H., Wyzard, C., & Hourcade, J. (2010). Instructional and communication tools: RSS feeds. *National Social Science Journal* (2) 33, 6-11.
- Wyzard, C., Snelson, C. & Rice, K. (2010). Looking Ahead at YouTube Research. *Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications 2010* (pp. 3797-3802). Chesapeake, VA: Association for the Advancement of Computing in Education. Retrieved from <http://www.editlib.org/p/35191>
- Beck, D., & Wyzard, C. (2010). Bridging the Digital Divide: Connecting Teachers with those on the other side of the divide. *Proceedings of Global Learn Asia Pacific (Global Learn) 2010:1 Global Learn Asia Pacific 2010--Global Conference on Learning and Technology* (pp. 3653-3658). Chesapeake, VA: Association for the Advancement of Computing in Education. Retrieved from <http://www.editlib.org/p/34452>
- Snelson, C., Rice, K., Wyzard, C. (in press). Research priorities for YouTube and video-sharing technologies: A Delphi study. *British Journal of Educational Technology*.

### **SELECTED BOOKS OR BOOK CHAPTERS**

- Pollard, C., VanDehey, T., & Pollard, R. (2007). *Educating Teachers: Technology Skills for the Classroom*, 2<sup>nd</sup> Edition. Boise, ID: ERC Publishing.
- Pollard, C., & Pollard, R. (2007). *Priorytety w zakresie badan na polu technologii edukacyjnej w Stanach Zjednoczonych*. In. K.Wenty and E.Perzyckiej (Eds). *Diagnoza I ewaluacja w przemianach edukacyjnych*. Szczecin, Poland: University of Szczecin.
- Pollard, C. & Pollard, R. (2008). *Teaching and Learning in a Digital World*. Boise, ID: ERC Publishing.
- Wyzard, C., Schroeder, B., & Haskell, C. (2009). Digital Age Teaching Skills: A Standards Based Approach. Boise, ID: ERC Publishing.
- Wyzard, C., Schroeder, B., & Haskell, C. (2010). Digital Age Teaching Skills: A Standards Based Approach. 2<sup>nd</sup> Edition. Boise, ID: ERC Publishing.

### **SELECTED PRESENTATIONS (2005-2011)**

*Looking Ahead at YouTube Research.* Paper presented at the World Conference on Educational Multimedia, Hypermedia and Telecommunications, Toronto, Canada, June 2010.

*The Imminent Evolution of Teacher Education in the United States: Re-envisioning Professional Development in a Digital Learning Era.* 12<sup>th</sup> International Conference on Education. Athens, Greece, May 2010.

*Online Student Teaching: Procedures and Practices,*  
E-Learn 2009 World Conference, Vancouver, B.C., October 2009.

*The Delphi Method: A Cross-Disciplinary Approach,*  
National Social Science Association, San Diego, CA, October 2009.

*Integrating Web 2.0 into Instruction.*  
Association Of Teacher Educators National Conference, Dallas, TX, February 2009.

*Using the Delphi Method for E-Research.*  
E – Learn 2008 World Conference, Las Vegas, NV., November 2008

*Understanding and Preparing Teachers of Millennial Learners.*  
E – Learn 2008 World Conference, Las Vegas, NV., November 2008

*Instructional and Communication Tools: RSS Feeds*  
National Social Science Conference, Albuquerque, NM, October 2008.

*Web 2.0 Strategies for Teaching and Learning*  
National Technology and Social Science Conference, Las Vegas, NV, April 2008.

*Planning a Lesson Integrating RSS Feeds*  
Association of Teacher Educators National Conference, New Orleans, LA, February 2008.

*Priorities in Educational Technology Research: A Delphi Study from Poland*  
4<sup>th</sup> International Technology, Knowledge and Society Conference, Boston, MA, January 2008.

## **EXTERNAL COMPETITIVE GRANTS**

"Building Bridges with Technology Grant". Co-authored with Carolyn Thorsen. Funded by Department of Education. Total: 1.2 million (2000 – 2003).

"An Examination of Telecommunications as a Teaching Strategy." Co-authored with Carolyn Thorsen and Holly Anderson. Boise State University College of Education. Funded for Spring, 1996. Total: \$3700.

"Who Will Do Science and Math in the 21st Century?" Co-authored with Betty Hecker. Boise State University Foundations Grant. Funded for 1995-1996. Total: \$4500.

"Evaluation of Teacher Training Effectiveness at Selected Technology Outreach Program Sites in Southwest Idaho." Co-authored with Carolyn Thorsen. Boise State University College of Education. Funded for 1994-1995. Total: \$3700.

"A Comprehensive Research Approach to Develop a Model of Effective Strategies for Providing Transitional Services for Adjudicated Youth. U.S. Department of Special Education. Project Coordinator. Funded 1993-1996. Total: \$330,000.

**SELECTED SERVICE (2005-2011)****Boise State University**

Research Committee – 2009, 2010  
 Bookstore Advisory Committee – 2009, 2010  
 Academic Grievance Committee, 2004 - 2008  
 ASBSU Outstanding Student Organizations Committee, 2006  
 Institutional Review Board (IRB), Member. 2000 – 2003.

**Boise State University, College of Education**

Teacher Education Coordinating Council – 2008 – 2010  
 Teacher Education Team, 2009 - 2010  
 Promotion & Tenure Committee, 1994, 2001 – 2008, 2009-2010  
 Evaluation, Promotion & Tenure Task Force, Fall, 2007 - Spring, 2008.  
 Curriculum Committee, 2001 – 2006.  
 Dean's Evaluation Committee, 1999, 2003, 2006.

**Boise State University, Departmental Service**

Associate Department Chair – 2009 – 2010  
 Curriculum Committee – 2009 - 2010  
 Adjunct Coordinator - Fall, 2008  
 Chair, Faculty Review Committee – 2008, 2009  
 Chair, Search Committee, Educational Technology Department, 2007-2008.  
 Chair, Search Committee, Educational Technology Department, 2006-2007.  
 Search Committee Member, Educational Technology Department, 2005-2006, 2009-2010  
 Search Committee Member, Educational Technology Department, 2004-2005.

**Professional Organization Service**

Chair, Technology for Teaching and Learning Special Interest Group, Association of Teacher Educators, 2002-2006.  
 Webmaster, Technology for Teaching and Learning Special Interest Group, Association of Teacher Educators, 2005-2006.  
 Secretary, Technology for Teaching and Learning Special Interest Group, Association of Teacher Educators, 2007 – 2009

**DAZHI YANG, Ph.D.**

Assistant Professor  
 dazhiyang@boisestate.edu  
 phone (208) 426 3212  
 E315

**EDUCATION****Purdue University, West Lafayette, IN**

8/2004-12/2008 Ph.D.in Educational Technology, Department of Curriculum & Instruction  
 8/2004-5/2006 Graduate Certificate in Applied Statistics, Department of Statistics  
 8/2002-5/2004 M.S. in Educational Technology, Department of Curriculum & Instruction

**AnqingTeachers' College, Anhui, China**

9/1991- 7/1995 B.A. in English Education, School of Foreign Languages

**SELECTED PROFESSIONAL POSITIONS**

**Assistant Professor**, Department of Educational Technology, Boise State University, 7/10 - present

**Postdoctoral Researcher and Instructional Designer**, School of Engineering Education, Purdue University, West Lafayette, IN, 9/08 -7/10

**Research Assistant**, Department of Curriculum & Instruction, Purdue University, West Lafayette, IN, 8/02- 8/08

**Online Learning Specialist Consultant**, Continuing & Distance Education, Purdue University, West Lafayette, IN, 6/07 - 8/07

**Co-instructor**, Department of Curriculum & Instruction, Purdue University, West Lafayette, IN, 8/06 - 12/06

**Instructional Designer**, Beijing Human Computer Co., Ltd., Beijing, China, 8/98 - 2/00

**Lecturer**, Anqing Health Sciences School, Anqing, China, 7/95 - 7/98

**COURSES TAUGHT (PAST SIX SEMESTERS ONLY)**

EDTECH 504: Theoretical Foundations of Educational Technology

EDTECH 597: Introduction to Statistics for Educational Technology

**SELECTED REFEREED PUBLICATIONS (2005-2011)**

1. Miller, L.R., Streveler, A.R., Yang, D., & Santiago Román, A. I. (In press). Identifying and repairing student misconceptions in thermal and transport science: Concept inventories and schema training studies. *Chemical Engineering Education*.
2. Yang, D., Richardson, J. C., French, B. F., & Lehman, J. D. (2010). The development of a content analysis model for assessing students' cognitive learning in asynchronous online discussions. *Educational Technology Research & Development*. doi: 10.1007/s11423-010-9166-1.
3. Yang, D., Olesova, L., & Richardson, J. C. (2010). Cultural differences on learner participation, communication, and learning in an online environment. *Journal of Educational Computing Research*, 43(2), 165-182.
4. Yang, D., Santiago, A. Streveler, R. A., Miller, R. L, Slotta, J., & Chi, M. (2010). Repairing student misconceptions using ontology training: A study with junior and senior undergraduate engineering

students. *Proceedings of 2010 American Society for Engineering Education Annual Conference*, Louisville, KY.

5. Richardson, J. C., Ertmer, P., Aagard, H., Ottenbreit, A., Yang, D., & Mack, N. C-G. (2008). Factors influencing teachers' implementation of digital age literacy skills and strategies. *Teacher Education and Practice*, 20(3), 239-262.
6. Yang, D., & Richardson, J. C. (2008). Students' online interaction styles: Can they change? *Journal of Educational Technology Development and Exchange*, 1(1), 1-12.
7. York, C., Yang, D., & Dark, M. (2007). Transitioning from face-to-face to online instruction: How to increase presence and cognitive / social interaction in an online information security risk assessment class. *International Journal of Information and Communications Technology Education*, 3(2), 42-52.
8. Miller, R. L., Streveler, R. A., Yang, D., & Santiago, A. (2009). Identifying and repairing students' misconceptions in thermal and transport science. *Proceedings of the 2009 American Institute of Chemical Engineers (AIChE) Annual Meeting*, Nashville, TN.
9. Yang, D., Streveler, R. A., Miller, R. L., & Santiago, A. (2009). Repairing misconceptions: A case study with advanced engineering students on their use of schema training modules. *Proceedings of 2009 American Society for Engineering Education Annual Conference*, Austin, TX.
10. Ertmer, P., Gedik, N., Richardson, J., Yang, D., & Newby, T. (2008). Undergraduate students' perceptions of the value of online discussions: A comparison between education and engineering students. In C. Crawford et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2008* (pp. 366-371). Chesapeake, VA: AACE.
11. Yang, D., Olesova, L., & Richardson, J. (2008). The impact of cross-cultural differences on learner participation and communication in asynchronous discussions. In C. Crawford et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2008* (pp. 825-829). Chesapeake, VA: AACE.
12. Olesova, L., Yang, D., & Richardson, J. (2008). The impact of barriers on the quality of students' postings in asynchronous discussions: A Case Study. In C. Crawford et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2008* (pp. 593-600). Chesapeake, VA: AACE.
13. Yang, D., & Richardson, J. C. (2007). Students' online interaction styles and individual online learning preferences. In *Proceedings of the Association for Educational Communications and Technology (AECT) Annual Conference 2007* (pp. 367-371). Anaheim, CA.
14. Yang, D. (2007). Designing an online course: What does it take? In *Proceedings of the Association for Educational Communications and Technology (AECT) 2007* (pp. 372-373). Anaheim, CA.
15. Yang, D., & Richardson, J. C. (2006). A model for generating discipline-based guidelines for developing and delivering online courses. *Proceedings of the Association for the Advancement of Computing in Education (AACE)'s E-Learn 2006: World Conference on E-Learning in Corporate, Government, Healthcare, & Higher Education*, 1533-1538.
16. Yang, D. (2006). Using Web-based resources to enhance teaching and learning. *Proceedings of the Association for the Advancement of Computing in Education (AACE)'s E-Learn 2006: World Conference on E-Learning in Corporate, Government, Healthcare, & Higher Education*, 1797-1800.
17. Yang, D., & Dark, M. (2005). A service learning project of information security risk assessment for k12 school corporations. In C. Crawford et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2005* (pp. 1672-1677). Chesapeake, VA: AACE.

#### SELECTED BOOKS OR BOOK CHAPTERS

1. Yang, D., & Richardson, J. C. (2010). Online interaction styles: Adapting to active interaction styles. In H. Yang & S. Yuan's (Eds.) *Handbook of Research on Practices and Outcomes in E-learning: Issues and Trends* (pp. 138-149). Hershey: PA. Information Science Reference.

2. Yang, D., & Richardson, J. C. (2009). Designing and developing online and distance courses. In P. Rogers et al., (Eds.) *Encyclopedia of Online and Distance Learning* (2<sup>nd</sup> ed) (pp. 555-561). Hershey, NY: Information Science Reference.
3. York, C. S., Yang, D., & Dark, M. (2008). Transitioning from face-to-face to online instruction: How to increase presence and cognitive / social interaction in an online information security risk assessment class. In J. Gutierrez's *Selected Readings on Telecommunications and Networking* (pp.405-415). Hershey: NY. Information Science Reference.

### SELECTED PRESENTATIONS (2005-2011)

1. Yang, D., Barrett, N., Magana, A., Streveler, R. A., Miller, R. L., & Santiago, A. (2011, April). *Teaching difficult engineering concepts in the language of emergent processes*. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), New Orleans, LA.
2. Yang, D., Santiago, A., Streveler, R. A., Miller, R. L., Slotta, J. D., & Chi, M. M. T. H. (2010, June). *Repairing student misconceptions using ontology training: A study with advanced engineering students*. Paper presented at the American Society for Engineering Education (ASEE), Louisville, KY.
3. Yang, D., Streveler, R. A., & Miller, R. L. (2010, April). *Can instruction reinforce misconceptions? Preliminary evidence from a study with advanced engineering students*. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), Denver, CO.
4. Olesova, L., Yang, D., & Richardson, J. C. (2010, April). *Cross-cultural differences in undergraduate students' perceptions of online barriers: A mixed methods study*. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), Denver, CO.
5. Miller, R. L., Streveler, R. A., Yang, D., & Santiago, A. (2010, February). *Using schema training to repair student misconceptions in thermal and transport science*. Poster presented at the National Science Foundation (NSF) Engineering Education Awardees Conference, Reston, VA.
6. Miller, R. L., Streveler, R. A., Yang, D., & Santiago, A. (2009, November). *Identifying and repairing students' misconceptions in thermal and transport science*. Paper presented at the American Institute of Chemical Engineers (AIChE) Annual Meeting, Nashville, TN.
7. Yang, D., Richardson, J. C., French, B. F., & Lehman, J. D. (2009, October). *A Mixed methods approach to develop a content analysis model for assessing students' cognitive learning in asynchronous online discussions*. Paper presented at the Association for Educational Communications and Technology (AECT) Annual Meeting, Louisville, KY.
8. Yang, D., Streveler, R. A., Miller, R., & Santiago, A. (2009, June). *Repairing misconceptions: A case study with advanced engineering students on their use of schema training modules*. Paper presented at the American Society for Engineering Education (ASEE), Austin, TX.
9. Yang, D., Richardson, J. C., French, B. F., & Lehman, J. D. (2009, March). *The development of a content analysis model for assessing students' cognitive learning in asynchronous online discussions*. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), San Diego, CA.
10. Yang, D., Olesova, L., & Richardson, J. C. (2009, March). *Cultural differences on learner participation, communication, and learning in an online environment*. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), San Diego, CA.
11. Richardson, J. C., Ertmer, P., Newby, T., Lehman, J., Sadaf, A., Yang, D., et al. (2009, March). *Students' perceptions of various instructional strategies in online discussions*. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), San Diego, CA.
12. Olesova, L., Yang, D., & Richardson, J. C. (2008, November). *Perceived value of online team work by culturally different groups*. Poster presented at the 14<sup>th</sup> Annual Sloan-C International Conference on Online Learning, Orlando, FL.
13. Richardson, J. C., Ertmer, P., Newby, T., Gedik, N., Yang, D., Sadaf, A., Cheng, X. Harris, C. (2008, November). *Online discussion question formats impact on students' perceived and actual learning*.

Paper presented at the 14<sup>th</sup> Annual Sloan-C International Conference on Online Learning, Orlando, FL.

14. Yang, D., Huang, W. D., & Richardson, J. C. (2008, March). *The change of individual learning preferences in computer-mediated conferences*. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), New York, NY.
15. Dark, M., York, C., Yang, D., Popescu, V., & Nita-Rotaru, C. (2008, March). *A pilot study on the design effectiveness of a new distance learning system*. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), New York, NY.
16. Yang, D., Olesova, L., & Richardson, J. C. (2008, March). *The impact of cross-cultural differences on learner participation and communication in asynchronous discussions*. Paper presented at the Advancement of Computing in Education (AACE) Society for Information Technology and Teacher Education (SITE) International Conference.
17. Olesova, L., Yang, D., & Richardson, J. C. (2008, March). *The impact of barriers on the quality of students' messages in asynchronous discussions*. Paper presented at the Advancement of Computing in Education (AACE) Society for Information Technology and Teacher Education (SITE) International Conference.
18. Ertmer, P., Gedik, N., Richardson, J., Yang, D., Newby, T. (2008, March). *Undergraduate students' perceptions of the value of online discussions: a comparison between education and engineering students*. Paper presented at the Advancement of Computing in Education (AACE) Society for Information Technology and Teacher Education (SITE) International Conference.
19. Yang, D., & Richardson, J.C. (2007, October). *Students' online interaction styles and individual online learning preferences*. Paper presented at the Association for Educational Communications and Technology (AECT) Annual Meeting, Anaheim, CA.
20. Yang, D. (2007, October). *Designing an online course: What does it take?* Paper presented at the Association for Educational Communications and Technology (AECT) Annual Meeting, Anaheim, CA.
21. Yang, D., & Richardson, J. C. (2006, October). *A model for generating discipline-based guidelines for developing and delivering online courses*. Paper presented at the Association for the Advancement of Computing in Education (AACE)'s E-Learn 2006: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education, Honolulu, HA.
22. Yang, D. (2006, October). *Using web-based resources to enhance teaching and learning*. Paper presented at Association for the Advancement of Computing in Education (AACE)'s E-Learn 2006: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education, Honolulu, HA.
23. Yang, D., & Dark, M. (2005, March). *A service learning project of information security assessment of K12 school corporations*. Paper presented at Association for the Advancement of Computing in Education (AACE) Society for Information Technology and Teacher Education (SITE) International Conference, Phoenix, AZ.

#### **SELECTED SERVICE TO UNIVERSITY, STATE, NATIONAL, OR INTERNATIONAL UNITS (2005-2011)**

1. University Committee Member, President's Task Force of Teaching and Learning with Technology
2. Editorial Review Board Member for the *International Journal of Communications and Information Technology Education* (IJICTE) – January, 2011 to December, 2013
3. Society of International Chinese in Educational Technology (SICET)- Assistant Director for Research and Public Relationship - 2009-2011

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**INSTRUCTION, RESEARCH, AND STUDENT AFFAIRS**  
**AUGUST 11, 2011**

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**SUBJECT**

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

**REFERENCE**

June 17, 2010

The Board approved a second reading to Board Policy III.W. Higher Education Research

**APPLICABLE STATUTE, RULE, OR POLICY**

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

**BACKGROUND/DISCUSSION**

The Board's Higher Education Research Policy, III.W., is intended to recognize Idaho's universities role as a driving force in innovation, economic development, and enhanced quality of life for Idaho. 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 Idaho's reputation as a national and international leader in excellence and innovation.

The Higher Education Research Council (HERC) of the Idaho State Board of Education is responsible for advising the Board on the implementation of strategies that increase the quality and quantity of research in Idaho, encourage continued public and private support of research, enhance the quality and quantity of academic research produced, increase faculty eligible to compete for research funds, where appropriate, development of Idaho public institutions' research infrastructure and the development and implementation of a higher education statewide strategic plan for research.

In addition to HERC there are various other committees in Idaho with similar efforts and interests to increase research among Idaho's universities and public and private industry. In order to streamline those efforts, create efficiencies, and focus HERC's efforts further, refinements are needed to the composition of HERC's membership.

HERC's current structure consists of the Vice Presidents for 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.

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Proposed revisions to Board Policy III.W., Higher Education Research includes the following proposed representation on HERC:

- the Vice Presidents for Research from Boise State University, Idaho State University, and the University of Idaho;
- a representative of the Idaho National Laboratory (INL); and
- three non-institutional representatives, with consideration of geographic, private industry involvement, and other representation characteristics;

Other modifications include new language for the composition of a HERC executive committee, a rotating schedule of the HERC Chair, and a nominating process for vacancies on HERC.

**IMPACT**

Approval of the amendments to Board policy will provide HERC with the structure needed to effectively address policy and programs consistent with the current climate of academic research in the Idaho.

**ATTACHMENTS**

Attachment 1 - Proposed Amendments for Board Policy III.W.,  
Higher Education Research

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**STAFF COMMENTS AND RECOMMENDATIONS**

Board staff recommends approval of proposed amendments to Board Policy III.W. Higher Education Research as presented.

**BOARD ACTION**

I move to approve the first reading of proposed amendments to Board Policy III.W., Higher Education Research to include the restructure of HERC.

Moved by\_\_\_\_\_ Seconded by\_\_\_\_\_ Carried Yes\_\_\_\_\_ No\_\_\_\_\_

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Idaho State Board of Education  
GOVERNING POLICIES AND PROCEDURES  
SECTION: III. POSTSECONDARY AFFAIRS  
SUBSECTION: W. Higher Education Research

June 2010 October 2011

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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. [HERC shall report annually to the Board on a schedule and in a format established by the Executive Director.](#)

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.

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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:
- The quality and quantity of academic research produced is extremely dependent upon the research infrastructure.  
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.

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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:

- i. direct and oversee the development of a higher education statewide strategic plan for research;
- ii. direct and oversee the use of Legislatively appropriated funds for higher education research;
- iii. determine and distribute to all interested parties the guidelines for submission of proposals under the competitive programs;
- iv. organize the review procedures for proposals submitted under the guidelines mandated and recommend to the Board which of these proposals should be funded;
- v. monitor the productivity of each funded project to warrant continued funding and to provide accountability.

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The membership of HERC shall consist of:

- i. 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;
- ii. a representative of the Idaho National Laboratory (INL); and
- iii. fourthree non-institutional representatives, with consideration of geographic, private industry involvement and other representation characteristics; and
- ~~iv. 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 fourthree non-institutional representatives. The fourthree 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.

One (1) of the Vice Presidents of Research shall serve as chair of the Council, with a new chair selected each academic year such that the chair shall rotate among the Vice Presidents of Research. No Vice President of Research shall hold a term in consecutive years.

Executive Committee:

The Executive Committee shall consist of the three Vice Presidents of Research.

e. Nominating Process

HERC shall nominate candidates for membership for Board consideration. The list of candidates, including letters of interest and biographical information, must be forwarded to the Board for consideration not less than 60 days prior to expiration of the term of a committee member, or within 30 days after any vacancy.

i. Incumbent Reappointment

If the incumbent candidate is interested in reappointment and is eligible to continue serving based on HERC's current membership structure, the incumbent will provide in writing his or her interest for reappointment, which will be forwarded to the Board for consideration.

ii. Open Appointment

- 1) HERC members shall solicit nominations with consideration given to geographic, private industry involvement, and other representation characteristics.

2) Each nominee must provide a written statement expressing his or her interest in becoming a member of HERC. Each nominee must also provide a description of his or her qualifications, and must identify his or her primary residence.

3) HERC will review all nominations for the vacant position and will forward the qualified candidates with recommendations to the Board for consideration.

The Board may, after a review of nominee's pursuant to the process described herein, consider other candidates for HERC membership identified by the Board or its staff.

## 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



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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 motivates 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:

- 1) The Vice President for Research or Chief Research Officer at the University of Idaho, Idaho State University, and Boise State University;
- 2) One member from each chamber of the Idaho state legislature;
- 3) One representative from Idaho National Laboratory;
- 4) One representative from the Idaho Department of Commerce – such individual shall be focused on economic development;

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- 5) 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.

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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.

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**DIVISION OF PROFESSIONAL-TECHNICAL EDUCATION**

**SUBJECT**

Second Reading, Proposed Amendments to Board Policy III.V, Section 3, Associate of Applied Science Degree

**REFERENCE**

June 22, 2011

First Reading, Board Policy III.V, Section 3, Associate of Applied Science Degree approved.

**BACKGROUND/DISCUSSION**

The Board approved a first reading of policy III.V., Section 3, Associate of Applied Science degree at the June Board meeting. The proposed changes consisted of reducing the number of general education credits from sixteen (16) to fifteen (15) credits and updating the title of the AAS degree core areas to bring them in alignment with Northwest Commission on Colleges and University (NWCCU) terminology. The 15 credit minimum would better align with student course taking patterns and the 3-credit course format. This would also create flexibility in student choice of courses and make the general education requirement more streamlined and cost effective for AAS degree majors. There have been no changes since the first reading.

**IMPACT**

The proposed policy changes will update Board policy to reflect the new general education requirements for an Associate of Applied Science degree.

**ATTACHMENTS**

Attachment 1 – Board Policy III.V

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**STAFF COMMENTS AND RECOMMENDATIONS**

The Division of Professional-Technical Education and Board staff recommend approval of the second reading of Board Policy III.V., Section 3, Associate of Applied Science Degree as presented.

**BOARD ACTION**

I move to approve the second reading of Board Policy III.V.3., Associate of Applied Science Degree as submitted.

Moved by \_\_\_\_\_ Seconded by \_\_\_\_\_ Carried Yes \_\_\_\_\_ No \_\_\_\_\_

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**Idaho State Board of Education**

**GOVERNING POLICIES AND PROCEDURES**

**SECTION: III. POSTSECONDARY AFFAIRS**

**SUBSECTION: V. Articulation and Associate Degree Policy**

**August 2011**

**1. Statewide Articulation**

**a. Associate of Arts and Associate of Science Degrees**

To facilitate the transfer of students, Boise State University, Idaho State University, Lewis-Clark State College, the University of Idaho, the College of Southern Idaho, North Idaho College, and the College of Western Idaho, shall individually and jointly honor the terms of this statewide articulation policy.

Students who complete requirements for the Associate of Arts or Associate of Science degree at an accredited institution in Idaho and Treasure Valley Community College will be considered as satisfying the lower division general education core requirements and shall be granted junior standing upon transfer to a four-year public institution in Idaho and will not be required to complete any additional lower division general education core courses subject to the conditions listed below.

Transfer students from any in-state or out-of-state academic accredited institution who have completed the equivalent of the State Board of Education's general education core for the Associate Degree will not be required to complete additional lower division general education core courses. However, these students must obtain certification of such completion. Certification of successful completion of the lower division general education core for students who have not completed the Associate of Science or Associate of Arts degree is the responsibility of the transferring institution.

This transfer policy will provide for the fulfillment of all general education, lower division core requirements only. It is not intended to meet specific course requirements of unique or professional programs (e.g., engineering, pharmacy, business, etc.). Students who plan to transfer to unique or professional programs should consult with their advisors and make early contact with a program representative from the institution to which they intend to transfer.

Transfer students who have not completed the Associate of Arts or Associate of Science or the general education core courses will not come under the provision of this articulation policy.

A maximum of seventy (70) lower division credit hours or one-half of the total credits required for a student's intended baccalaureate degree, whichever is greater, will normally be accepted for transfer from accredited community or junior colleges.

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b. Associate of Applied Science Degrees

Students who complete all or a portion of the State Board of Education's general education coursework for the Associate of Applied Science degree at one of the public postsecondary institutions in Idaho may fully transfer those completed general education core courses into an academic program. However, professional-technical transfer students who have not completed any courses under the general education core will not be covered under the provisions of this articulation policy.

2. Transfer Associate Degree

The lower division general education core requirement must fit within the following credit and course requirements and must have a minimum of thirty-six (36) credit hours.

	Required Courses	Minimum Credits
a. <u>Communications</u> Coursework in this area enhances students' ability to communicate clearly, correctly, logically, and persuasively in spoken English. <u>Disciplines:</u> Speech, Rhetoric, and Debate	1	2
b. <u>English Composition</u> In meeting this goal, students must be able to express themselves in clear, logical, and grammatically correct written English. Up to six (6) credits may be exempt by ACT, SAT, CLEP or other institution accepted testing procedure. *3 or 6 credit hours depending upon initial placement results.	1	3 to 6*
c. <u>Behavioral and Social Science</u> Coursework in this area provides instruction in: (1) the history and culture of civilization; (2) the ways political and/or economic organizations, structures and institutions function and influence thought and behavior; and (3) the scientific method as it applies to social science research. <u>Disciplines:</u> Anthropology, Economics, Geography, History, Political Science, Psychology and Sociology. Note: Courses must be distributed over two (2) different disciplines.	2	6
d. <u>Humanities, Fine Arts, and Foreign Language</u> Coursework in this area provides instruction in: (1) the creative process; (2) history and aesthetic principles of the fine arts; (3) philosophy and the arts as media for exploring the human condition and examining values; and (4) communication skills in a foreign language. <u>Disciplines:</u> Art, Philosophy, Literature, Music, Drama/Theater, and Foreign Languages.	2	6
e. <u>Natural Science</u> Coursework in this area: (1) provides an understanding of how the biological and physical sciences explain the natural world and (2) introduces the basic concepts and terminology of the natural sciences. <u>Disciplines:</u> Biology, Chemistry, Physical Geography, Geology, and Physics. Note: Courses may be distributed over two (2) different disciplines and must have at least one (1) accompanying laboratory experience.	2	7



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	Required Courses	Minimum Credits
f. <u>Mathematics</u> Coursework in this area is intended to develop logical reasoning processes; skills in the use of space, numbers, symbols, and formulas; and the ability to apply mathematical skills to solve problems. <u>Disciplines:</u> College Algebra, Calculus, Finite Mathematics, and Statistics.	1	3

3. Associate of Applied Science Degree.

This professional-technical degree requires a minimum of 15 credit hours of general education coursework selected from each institution's general education core and is comparable to the general education core of the Associate of Arts (A.A.) and Associate of Science (A.S.) degrees. The courses completed from the general education core of the A.A.S. will be fully transferable to the A.A., A.S., and baccalaureate degrees.

	Required Courses	Minimum Credits
a. <u>English/Communication</u> In meeting this goal, students must be able to express themselves in clear, logical, and grammatically correct written English. <u>Disciplines:</u> English 101 required, English 102 or Communication 101; An Applied English or Technical Writing course may be used if found to be comparable to ENGL 102.	2	6
b. <u>Mathematics/Computation</u> Coursework in this area is intended to develop logical reasoning processes; skills in the use of space, numbers, symbols, and formulas; and the ability to apply mathematical skills to solve problems. <u>Disciplines:</u> College Algebra, Calculus, Finite Mathematics and Mathematical Statistics. An Applied Mathematics course may be used if found to be comparable to a traditional mathematics course.	1	3
c. <u>Social Science/Human Relations</u> Coursework in this area provides the student with the skills needed for understanding individuals in the work place and the functioning of thought and behavior. <u>Disciplines:</u> Human Relations, Psychology, and Sociology	1	3
d. <u>Elective</u> Coursework in this area may come from any general education core requirement as listed in III.V.2.	1	3

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**SUBJECT**

Second Reading, Proposed Amendments to Board Policy III.M., Public Postsecondary Accreditation

**REFERENCE**

June 22, 2011

First Reading, Board Policy III.M., Public Postsecondary Accreditation approved

**BACKGROUND/DISCUSSION**

The Board approved a first reading of policy III.M., Public Postsecondary Accreditation at the June 2011 Board meeting. The proposed changes to this policy include the deletion of references to Board recognized accrediting agencies and institutions as these requirements are addressed in IDAPA 08.01.11 Registration of Postsecondary Educational Institutions and Proprietary schools. Board policy is specific to the institutions they govern.

Additional changes update Board policy to reflect the current Northwest Commission on Colleges and Universities (NWCCU) institutional reporting requirements for accreditation. There have been no changes since the first reading.

**IMPACT**

The proposed policy changes will update Board policy to reflect the new NWCCU processes and procedures for institutional reporting on accreditation standards and requirements.

**ATTACHMENTS**

Attachment 1 – Board Policy III.M., Public Postsecondary Accreditation Page 3

**STAFF COMMENTS AND RECOMMENDATIONS**

Board staff recommends approval of the second reading of Board Policy III.M., Public Postsecondary Accreditation.

**BOARD ACTION**

I move to approve the second reading of Board Policy III.M., Public Postsecondary Accreditation as submitted.

Moved by \_\_\_\_\_ Seconded by \_\_\_\_\_ Carried Yes \_\_\_\_\_ No \_\_\_\_\_

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**Idaho State Board of Education**  
**GOVERNING POLICIES AND PROCEDURES**  
**SECTION: III. POSTSECONDARY AFFAIRS**  
**M. Public Postsecondary Accreditation**

August 2011

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Institutions under the governance of the Board are evaluated by the Northwest Commission on Colleges and Universities (NWCCU) based on a seven-year accreditation cycle. Evaluations are conducted in progressive stages that build on previous findings and regular feedback from peer evaluators and the NWCCU Board of Commissioners. Institutions will follow the process prescribed by NWCCU and shall update the Board as to the content and status of their self evaluation at each stage of the reporting cycle.

Board members shall be provided with opportunities to participate in the evaluation process. Prior to a formal NWCCU accreditation visitation to an institution (Three-Year and Seven-Year visits), the institution president will notify the Board's Executive Director of such visit and schedule a time and place for Board representation during the visit. At a minimum, the Board's Executive Director (or designee) and three Board members shall visit the NWCCU self-study team during each seven-year visitation to an institution. Board member participation for the Three-year visits will be determined by the Board's Executive Director upon consultation with the NWCCU review team.

Copies of the NWCCU seven-year accreditation self-study completed by an institution under the governance of the Board shall be submitted to the Board's Executive Director at the same time the report is forwarded to the NWCCU. A draft copy of the NWCCU year one self-evaluation report completed by an institution shall be shared with the Board at a regularly scheduled meeting prior to its submission to the NWCCU. A copy of each corrective action progress report submitted to NWCCU by an institution will also be forwarded to the Board's Executive Director at the same time the report is sent to the NWCCU.

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